Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

February 11, 1957

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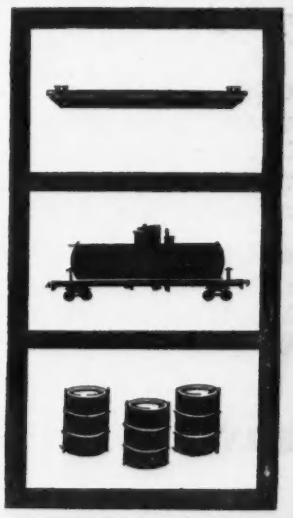

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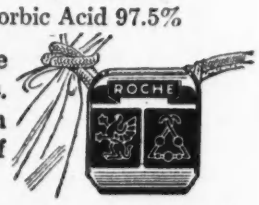

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Oil, Paint and Drug Reporter

Vol. 171 No. 6 30 Church St., New York 7, N. Y. February 11, 1957

Patent System Upheld

A staff report of the house antitrust subcommittee made public last week could find "no discernible threat to the integrity of the American patent system and no basic incompatibility or irreconcilable conflict between the patent laws and the antitrust laws."

The conclusions were reached by the committee staff after nearly a year's review of many court decisions in both the patent and antitrust field over the past thirty years when the antitrust laws first were applied against questionable practices in the patent monopoly field.

Said the staff report:

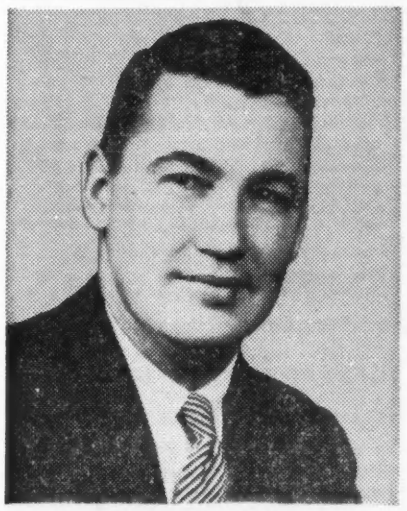
"The patent owner whose practices are consistent with the scope of his patent grant runs no risk of antitrust involvement. It is the patent owner who attempts to exploit his patent beyond its intended scope who loses his patent protection.

"With few exceptions the so-called patent-antitrust cases mark attempts to use a patent for purposes for which it was not intended. Such attempts necessarily subject the patent owner to the risk of having his patent tested and declared invalid or infringed with impunity, and to the penalties of the antitrust laws, for the courts have been alert to recognize and condemn the use of patents in monopolization and in combinations to restrain trade.

"The present statutory scheme and judicial climate afford ample means for preserving the rights of patent owners in the ligitimate exploitation of their property, while at the same time correcting patent abuse and safeguarding competitive opportunity."

Butadiene Plant Sale Measure Passes House Without Opposition

The administration's new bill to sell the Louisville, Ky., alcohol-butadiene plant was passed without opposition in the house last week and sent to the senate for concurrent approval. Efforts will be made to get action on the measure as soon as possible so that sale of the plant can be completed before congress adjourns the session sometime in July or August. Last of the government's synthetic rubber industry facilities, the plant is currently under a lease to Publicker Industries, Inc., Philadelphia, which terminates April 4, 1958. The plant has a net value of $6,629,000 and a rated capacity of 60,000 short tons of butadiene a year, using alcohol as the raw material.



DIAMOND ALKALI MANAGER: L. J. Polite, jr., promoted to product sales manager of the chlorinated products division of Diamond Alkali Company, Cleveland, Ohio.

Future Buyer Won't Be Saddled

Because alcohol-butadiene can no longer compete with petroleum-butadiene in the synthetic rubber market, the plant is considered to have outlived its purpose and the future buyer will not be saddled with the earlier requirements that it be continued in the production of alcohol-butadiene. Instead, the national security clause to be written into the sales contract will provide that for the next ten years the purchaser must give assurances that the plant, or facilities of equivalent capacity, will be available for production of one or more chemicals important to national security.

The bill (HR 2528) defines the term "chemical products important to the national security" as meaning (1) chemicals for which expansion goals have been established under the defense production act during the years 1951-55, (2) chemicals for the production of which a material has been determined to be strategic and critical under the stockpiling law, or (3) any other chemical which the President may approve as important to the national defense upon request of the Federal Facilities Corporation or the purchaser of the plant.

The bill provides for the invitation for bids for purchase of the plant to be out-

—Continued on page 38

Monsanto Negotiating Sale of Norfolk Works

Monsanto Chemical Company, St. Louis, Mo., revealed last week that it is entering into negotiations for the sale of equipment and property of its Norfolk, Va., plant, closed and on stand-by status since last June 15.

The plant, operated by Monsanto since 1925, formerly processed cocoa expeller cake to extract cocoa butter and crude theobromine. The latter was shipped to a company plant at St. Louis for use in the production of natural caffeine and refined theobromine. Monsanto no longer manufactures either of these products, but

—Continued on page 66

DuPont to Build Its Third Titanium Dioxide Facility

E. I. duPont de Nemours & Co., Wilmington, Del., will build its third titanium dioxide plant on a 1,500-acre site near New Johnsonville, Tenn. The facility will have a capacity of 125 tons of titanium dioxide a day.

Actual construction work will get under way soon, and the plant is expected to be in operation early in 1959. The new unit, to be known as the Johnsonville plant, will

—Continued on page 49

Treasury Wants Dumping Act Modified by Congress to Provide Swifter, Better Enforcement

As the Treasury Department sees it, congress should modify the anti-dumping act, the statute aimed at preventing unfair imports from coming into the United States. What is needed, Treasury says, is greater speed, efficiency and certainty in its enforcement. Though the law has shortcomings, the department, nevertheless, feels that it has succeeded in thwarting raids on the American market.

Treasury's views are contained in a special report submitted last week in accordance with provisions of the customs simplification act passed by congress last year. The department's report was referred immediately to the senate and house committees having jurisdiction over customs matters.

Chemical Industry Reaction Mixed

Chemical industry reaction to the report was mixed. It was noted that the department ignores one of the industry's chief recommendations—that more publicity be given to anti-dumping investigations. (OPD, 12/17/56). However, several of its other proposed changes for determining fair value are adopted.

Representatives of the importers blasted the report for its failure to recommend protection to importers against complaints of dumping which have no basis in fact.

Recommendations made in the report deal both with needed legislation and present regulations and administration. In the matter of changing the law to "put an end to the anomalous situation whereby a finding can be made under the anti-dumping act, but no dumping duties can be collected despite continuance of sales at less than fair value," the report proposes that this objective be accomplished in the following manner:

- Make it impossible for foreign exporters to avoid assessment of dumping duties by placing unimportant restrictions on home consumption sales.
- Provide that quantity discounts shall be taken into consideration as a circumstance of sale which can lead to positive assessment of dumping duties as well as to avoidance of assessment of such duties, as is now the case.
- Take into consideration other circumstances of sale which may differ as between home consumption and export

—Continued on page 66

WEST VIRGINIA SALES HEAD: H. E. Coleman, former general sales manager of the Kelco Company, who has joined the polychemicals division of West Virginia Pulp & Paper Company, New York, as sales manager.

Verona Chemical Purchases Outstanding Pharma Stock

Verona Chemical Company, Newark, N. J., has bought all the outstanding stock of Pharma Chemical Corporation, New York, it was disclosed last week by Ernest K. Halbach, president of Verona. The amount paid by the Newark firm was not divulged.

Pharma, which has two plants at Bayonne, N. J., is a producer of a broad range of dyestuffs. Verona makes a line of organic intermediates and is an importer of some dyestuffs. In addition to its Newark facilities, Verona has its dyestuffs division located in Union, N. J.

Under terms of the transaction, Pharma will be operated under its own name as a subsidiary of Verona. Dr. Eugene A. Markush, president of the acquired firm, is being retained by Verona to continue as head of the Pharma operation.

Di-isobutylene Unit Completed by Texaco

Texas Company, New York, has completed facilities in Port Arthur, Tex., for the production of di-isobutylene. Initial capacity will be 8 million pounds annually, but provision is being made for expansion as requirements increase.

Di-isobutylene will be available in tank-car lots from the new facilities, which are expected to go into operation by February 15.

The product is manufactured by polymerizing isobutylene, which is itself a product of thermal and catalytic cracking of petroleum fractions. The Texaco refinery at Port Arthur, where the new facilities are located, is the largest of the company's eleven US refineries.

Completion of the di-isobutylene facilities will mark another step in Texaco's current petrochemicals expansion, which includes construction of a lubricating oil additive plant in Port Arthur and an ammonia plant at Lockport, Ill.

ODM Gets New Director

Gordon Gray, assistant Secretary of Defense for internal security affairs since 1955, has been named to succeed Arthur S. Flemming as director of the Office of Defense Mobilization. Mr. Flemming resigned last week to resume the presidency of Ohio Wesleyan University.

Belgium Behind Other Countries in Chemical Growth

"Belgian chemical output has been relatively stationary in recent years and has not shared in the vast expansion that has characterized chemical production in other Western European countries and the United States."

That statement is from the Business and Defense Services Administration's latest chemical and rubber report, which sets forth data that had previously been difficult to obtain and which had been limited largely to information on foreign trade.

The following summary contains the salient points of the report, which is taken from a special supplement on the industry published by Agence Economique et Financiere (AGEFI):

"Belgian chemical output has been relatively stationary in recent years and has not shared in the vast expansion that has characterized chemical production in other Western European countries and the United States.

"A relatively quick comeback was made at the end of World War II, but since then progress has not gone as far or as fast as was expected. The industry is characterized by concentration on heavy chemicals, the use of coal as raw material, and considerable activity in the export market. Belgium has one of the highest per capita outputs of sulfuric acid and fixed nitrogen among chemical-producing countries.

"Belgian producers point out that foreign countries, especially the United States and the United Kingdom, were able to develop many new technics during World War II and the Korean emergency when cost was a secondary factor.

"Later, plants and facilities were available for peaceful purposes and a vast amount of know-how had been acquired. Secondly, the chemical industries in the

—Continued on page 36

Calcium Hypochlorite Output Boost Slated

The industrial chemicals division of Olin Mathieson Chemical Corporation, Baltimore, Md., is planning a 25 percent increase in capacity for the manufacture of high-test calcium hypochlorite.

The new capacity will be obtained through modernization and addition of equipment at Olin's existing hypochlorite plant at Niagara Falls, N. Y. Completion of the work is scheduled for early fall.

Silicon Full-Scale Installation To Be Built in N. C. by duPont

E. I. duPont de Nemours & Co., Wilmington, Del., plans to start immediate construction on what is claimed to be the nation's first full-scale facility for the production of hyper-pure silicon. The plant, to be constructed on a large tract of rolling timberland near Brevard, N. C., is expected to be ready for operation early next year. The new installation, to be operated by duPont's pigments department, will be known as the Brevard plant. It is expected to turn out about 50,000 pounds of semi-conductor grade silicon annually.

CATALIN VICE-PRESIDENT: Frank E. Hadley, midwest sales manager of Catalin Corporation of America, New York, who has been named sales vice-president of its thermoplastic division.

Located in Transylvania County at the western tip of North Carolina, the 10,500-acre plant site offers protection against airborne contamination. Since impurities in silicon are measured in parts per billion, duPont explained, extremely pure air is essential in its manufacture.

DuPont Is Nation's Only Producer

DuPont pioneered the commercial production of hyper-pure silicon and is the nation's only producer today. The material is used widely in the electronics field —in the manufacture of such devices as transistors, diodes and power rectifiers.

Because of its extreme purity and the difficulty of purification, the material sells at $320 a pound. However, a small amount —worth from 5 to 10 cents—makes up the heart of the new electronic devices.

The Brevard plant will also have an annual capacity of 20,000 pounds of "solar-cell' grade silicon. This grade, introduced about six months ago, selling today at $150 a pound, was developed by duPont for use in the so-called "solar batteries" which convert the direct rays of the sun into electrical energy.

At present, silicon is produced in a unit at duPont's Newport, Del., plant. This unit will continue to produce the material during the period of construction at Brevard and will be used thereafter for research and product development.

Elkan, River Plate Form New Company

Elkan-River Plate Corporation, with offices at 2 Beaver street, New York, has been formed as the result of an agreement between H. Elkan & Co., Chicago, and River Plate Corporation, Newark, N. J. The company will be a wholly-owned subsidiary of Elkan.

The new company will represent the brands of quebracho, wattle and other tanning materials heretofore represented by River Plate Corporation.

The arrangement has also resulted in the merging of the tannin sales and import divisions and personnel of River Plate Corporation and Tanime Corporation, a division of H. Elkan, into a single sales and import division.

The liquefying business of River Plate Corporation was not affected by the agreement.

Caustic Terminal Going Up

Dow Chemical Company, Midland, Mich., has started construction of terminal facilities at Baltimore, Md., for storage and distribution of 50 percent caustic soda solution. The terminal is expected to be in operation in early April.

Spencer Elects Five V. P.'s, Reassigns Officers' Work

Spencer Chemical Company, Kansas City, Mo., has announced the election of five new vice-presidents and the assignment of new responsibilities for its principal officers.

J. C. Denton, formerly general works manager, has been elected vice-president for agricultural chemicals and will be in charge of an integrated product division responsible for the production and sale of the company's agricultural chemical products.

H. R. Dinges, formerly general manager of industrial chemical sales, has been elected vice-president for industrial chemicals and will be in charge of an integrated product division responsible for the industrial chemical and commercial product segments of the company's business.

Frank Pyle, formerly works manager of the company's polyethylene plant at Orange, Tex., has been elected vice-president for plastics and will head the company's plastic division including produc-

—Continued on page 37

The Week's Price Changes

Bromine, Casein, Vanilla Beans and Tall Oil Priced Higher. Carbonate, Chlorides, Oxide and Sulfate of Copper Decline.

Prices Advanced

Bromine, 1c. per lb. (p. 34).
Casein, ¾c. per lb. (p. 54).
Oil, geranium, Bourbon, 75c. per lb. (p. 52).
Tall, dist., ¼c. per lb. (p. 59).
refd., ¼c. per lb.
Tin, ¼c. per lb. (p. 34).
Vanilla beans, bourbon, 50c. per lb. (p. 52).

Prices Reduced

Acid, coconut oil, 1½c. per lb. (p. 59).
Oleic, ½c. per lb. (p. 59).
Copper carbonate, 1c. per lb. (p. 34).
Chloride, cupric, anhyd., 1c. per lb. (p. 34).
cryst., dihydrate, ¾c. per lb.
dried, ¾c. per lb.
cuprous, 1.4c. per lb.
Oxide, red and black, 2c. per lb. (p. 54).
Sulfate, monohydrated, 75c. per cwt. (p. 34).
Cottonseed meal, $1 per ton (p. 59).
Lard, cash, ¾c. per lb. (p. 59).
Linseed meal, $1 per ton (p. 59).
Mangrove bark, So. Am., $1 per ton (p. 62).
Molasses, New Orleans, ¼c. per gal. (p. 43).
Oil, castor, Braz., ¼c. per lb. (p. 59).
Corn, crude, ¼c. per lb. (p. 59).
refd., ¼c. per lb.
Oil, cottonseed, crude, ⅜c. per lb. (p. 59).
refd., ⅜c. per lb.
Palmarosa, 25c. per lb. (p. 52).
Peanut, crude, ½c. per lb. (p. 59).
refd., ½c. per lb.
Soybean, crude, ¼c. per lb. (p. 59).
refd., ¼c. per lb.
Spearmint, 15c. per lb. (p. 52).
Peanut meal, 50c. per ton (p. 59).
Quebracho extract, solid, ¾c. per lb. (p. 62).
Wattle extract, ¾c. per lb. (p. 62).
Wax, candelilla, 5c. per lb. (p. 59).
Carnauba, crude, Ceara, 1c. per lb. (p. 59).
Parnahyba, 1c. per lb.
Yellow, 1c. per lb. (p. 59).
Japan, 2c. per lb. (p. 59).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100—1949 average)

Feb. 8, 1957	Feb. 1, 1957	Feb. 10, 1956
111.03	111.13	107.08

Zirconium Products Firm Set

Mallory-Sharon Titanium Corporation, Niles, Ohio, and National Distillers Products Corporation, New York, have teamed on a fifty-fifty basis to form a new company, Reactive Metals, Inc. The new firm will be initially engaged in the melting of zirconium and its alloys and the manufacture of certain zirconium mill products, with facilities to be built at Ashtabula, Ohio, site of National Distillers' zirconium sponge plant.

Reactive Metals, Inc., will be operated independently of Mallory-Sharon's present activities in the titanium field and manufacture of titanium and zirconium sponge by U. S. Industrial Chemicals Company, division of National Distillers.

James A. Roemer, president of Mallory-Sharon, described his company's part in the joint venture as "an opportunity to put the know-how we've acquired in producing titanium mill products to work in the fast-growing zirconium field."

John E. Bierwirth, president of National Distillers, said, "The formation of this subsidiary will avoid for zirconium 'growing pains' such as those which delayed titanium's coming of age.

"There are many steps between manufacture of sponge and the fabrication of finished parts, and capacity for all these steps must grow at the same rate to keep out USI division's sponge plant operating at full capacity when it comes on-stream.

"This new subsidiary will therefore start to concentrate on making ingots and those mill products that cannot be supplied by others rapidly enough to meet the anticipated needs of the industry."

SOCMA Shifts Outing Date

Synthetic Organic Chemical Manufacturers Association has changed the dates of its 1957 outing. Formerly slated May 26 to 28 at the Skytop Lodge, Skytop, Pa., it will now be held May 27 to 29 at the same place. In making the shift, SOCMA pointed out that the former dates fell on a Sunday to Tuesday. It believes that the new dates—Monday to Wednesday—will be more convenient.

Indiana Standard Buys Illinois Fertilizer Firm

Standard Oil Company (Indiana), Chicago, has bought all outstanding common stock of Schrock Bros. Company, fertilizer firm at Congerville, Ill.

Schrock Bros. will continue in business as an affiliate of Indiana Standard, principally for the sale of anhydrous ammonia in Illinois, Indiana, Iowa, Nebraska and Kansas. W. O. Frazier, former assistant sales manager for Indiana Standard at South Bend, Ind., is president and director of the fertilizer affiliate.

Nitrogen Generator Made By Baker at East Newark

A nitrogen generator with a wide controlled-hydrogen-content range has been developed by Baker & Co., East Newark, N. J., a unit of Engelhard Industries.

Metal, electrical, chemical, food, synthetic-fiber and petroleum-products manufacturers can use this "Nitroneal" generator to produce oxygen-free nitrogen from ammonia in their own plants at a cost many times less than that of nitrogen purchased in cylinders, according to Baker.

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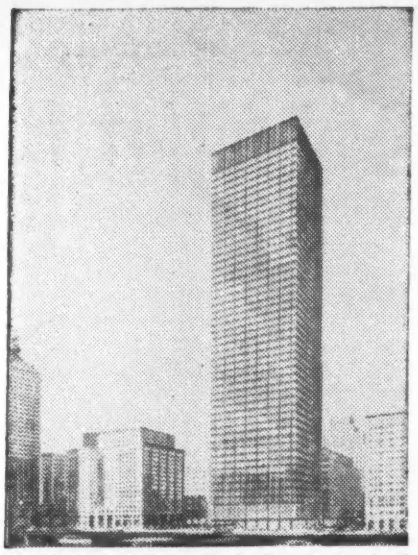

CARBIDE'S NEW HOME: Architect's sketch of new home office building of Union Carbide & Carbon Corporation, to be built at a cost of $46 million on Park avenue in New York. The stainless steel and glass structure, which will be fifty-two stories high, is slated for completion in 1960.

Olin Is Readying New Surfactant Line

The industrial chemicals division of Olin Mathieson Chemical Corporation, Baltimore, Md., is readying a line of nonionic surface active agents for general industrial use which it will market under the name "Poly-Tergent."

Nonionic agents are finding increasing use of emulsifiers, wetting agents, detergents and dispersants in the textile, paper, leather, metalworking and other industries. They are characterized by their chemical stability and complete compatibility with other materials such as acids alkalies, and other detergents, particularly the cationic type.

Four members of the "Poly-Tergent" line are being offered initially, with others to follow. All of this first group are alkyl phenol polyglycol ethers. They are liquids made from petroleum-base materials.

"Poly-Tergent B-200" is reportedly useful in solvent systems as a detergent and

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Air Separation Installation Is Going Up in California

Air Reduction Pacific Company, a division of Air Reduction Company, New York, has broken ground for a multi-million dollar air separation and liquefaction plant at Bassett, Calif., a few miles from Los Angeles.

The new plant will produce daily fifty-five tons of high purity liquid oxygen, fifteen tons of liquid nitrogen, and three and one-half tons of liquid argon. The cost of the plant, including related delivery facilities, will be in excess of $7,500,000.

Scheduled for completion late in the year, the new plant will serve primarily the aircraft, steel, metal fabricating, chemical and food processing industries in the California, New Mexico and Arizona areas.

Woodbury Buys Property Of Brancucci in Denver

Woodbury Chemical Company, St. Joseph, Mo., has purchased the buildings and property of Brancucci Chemical Company, Denver, Col., and will take over the active operation of the Brancucci property in March.

A year ago, Woodbury acquired Export Chemical Company of Colorado and last summer it purchased the dust plant of Geigy Company, in McGregor, Tex.

Cresols, Cresylic Acids Are Secure Because of Versatility, Carpenter of BDSA Declares

The future for cresols and cresylic acids seems certain because of the versatility of the products, says James H. Carpenter, of the Business and Defense Services Administration. Talking before the American Coke and Coal Chemicals Institute in Chicago last week on "Aspects and Prospects for Cresols and Cresylic Acids," Mr. Carpenter said, "As soon as one use diminishes, as for example, health soaps, another one surges forward, as for example, dibutyl-p-cresol."

As one resin use recedes, another one seems to increase. When there is a shortage of domestic coaltar acid, and especially when there are steel or labor strikes, the petroleum industry may be expected to offer larger volumes and the foreigners will sell larger amounts in this country. Inversely, when the production of domestic acid is large, the importers will expect to sell less foreign acid in this country.

A.D.F. Demand Small

"The European manufacturers have never seemed to have a large demand for acids of the A.D.F. specification in their countries excepting for symmetrical xylenol, partially because they have saved such acid for export to this country and, also, because they generally obtained a higher price in this country. The lower boiling more desirable grades for most purposes, produced at the same time that A.D.F. grades are made, could then be used locally or exported to other countries where there is little or no import duty. The United States has never been an exporter of any tar acids, besides synthetic phenol, and foreign producers have supplied the world, generally speaking," Mr. Carpenter said.

"It has been stated that the maximum potential amount of petroleum cresylic acid is 77,000,000 pounds and that petroleum cresylic has 'an uncertain present and a still more uncertain future.' To the contrary, it should be stated that two petroleum refiners are reported to be expanding their capacity, and that this maximum may soon be attained or even exceeded. Production in 1955 was 37,000,000 pounds of refined cresylic acid and separated phenol and 24,500,000 pounds of crude cresylic acid, previously explained as high boiling.

"Some of this high-boiling acid may have been refractionated and the separated lower boiling grade reported as refined cresylic. Coaltar cresol and cresylic acid total in 1955 was 65.5 million pounds and phenol was 38 million pounds. In addition, 7,700,000 pounds of pure cresols were mostly from coal tar origin.

"Dutiable imports were 400,000 pounds and duty free imports were 24.5 million pounds making a total for the year of 197,600,000 pounds from non-synthetic origin excepting a small amount of syn-

—Continued on page 42

Rabies Vaccine Safety Is Increased by Eli Lilly

A new and safer rabies vaccine, produced in embryonated duck eggs, is now available to physicians and pharmacists. It has been shown in tests to be free of a "paralytic factor" that sometimes has caused paralysis and death during rabies treatment.

Found in conventional rabies vaccines made of rabbit brain tissue, the "paralytic factor" appears to be related to myelin, the covering of brain nerve fibers. The exclusion of myelin from the new vaccine

—Continued on page 38

Catalin Forms Chemical Unit

Catalin Corporation of America, New York, has formed a new chemical division. Antioxidants now being produced for the petroleum, chemical, pharmaceutical and food industries will be among the first products to be marketed by the new unit, which will be headed by Paul A. Krentel.

Dr. F. N. Woodward

Arthur D. Little Sets Up British Unit

Arthur D. Little Research Institute has been set up in Great Britain to undertake basic scientific investigations for clients. Located in the laboratories formerly occupied by the Institute of Seaweed Research at Inveresk near Edinburgh, the new organization is sponsored by Arthur D. Little, Inc., Cambridge, Mass., and several prominent individuals in the United Kingdom.

Dr. F. N. Woodward will be director of the operations of the new institute at Inveresk, where he has been director of the Institute of Seaweed Research for the past ten years.

Relations between the new institute and ADL will be coordinated from Cambridge by Dr. Lawrence W. Bass, vice-president of the American consulting firm.

The costs of establishment and initial support of the institute will be borne by American funds, but future research projects there will be open to British and continental sponsorship on comparable terms. While the majority of the staff will be British, the addition of scientists from the continent is planned.

Lord Bilsland, president of the Scottish Council, will be chairman of the new in-

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Amoco Planning Facility To Make Aromatic Acids

Amoco Chemicals Corporation, Chicago, one of the surviving companies of the reorganization of Standard Oil Company (Indiana), Chicago (OPD, 2/4/57) has announced that its first major development project will be the construction of the only plant of its type, somewhere in the midwest, for an exclusive new hydrocarbon oxidation process to produce aromatic acids from petroleum raw materials.

Jay H. Forrester, president, added that the company "will invest heavily in research aimed at creating new products for the paint, rubber, plastic and chemical industries."

Durez, Entering Polyesters Field, Builds New Plant

A new plastics field, polyester molding compounds, will be entered by the Durez Plastics Division of Hooker Electrochemical Company, Niagara Falls, N. Y., when a $570,000 project is completed and in operation on a commercial scale in the early fall.

The foundations will be completed this month for an $80,000 concrete and steel building at the Durez Division's main plant in North Tonawanda. Polyester resin manufacturing equipment will require the balance of the $570,000 estimated to be spent. Bjarne Klaussen, president, said the new resin building will permit a substantial increase in Durez capacity.

Line 'Entirely Different'

An entirely different line of light-colored polyester molding compounds will be made from a new family of polyester resins to be manufactured in the new building in both regular and self-extinguishing grades. The general-purpose thermosetting molding compounds to be made in existing equipment from these new resins are in several ways unlike any other plastics in the field today and the range of colors which can be offered is unlimited, Hooker said.

The new polyesters, possessing excellent color stability even in light shades, have been produced experimentally by the Durez Plastics Division for about two years. Offered in limited quantities to a few major customers on an experimental basis for some time, beige, green, blue, yellow, turquoise, and pink molding compounds have been well received for use in sewing machine motor housings, foot pedal assemblies, knobs and bobbins, for a variety of handles for household appliances, and other items. Sales are expected to be substantial when the material becomes available in commercial volume, Hooker added.

The new materials are said to combine several other outstanding properties which will be advantageous to both the molder and the end-user. In the field of colored plastic molding materials, the new line of polyester molding compounds will offer superior dimensional stability and heat resistance. The new compounds are similar in physical properties and improved in electrical properties over the general pur-

—Continued on page 30

Merck Subsidiary Acquires Pharmaceutical Firm in UK

Merck Sharp & Dohme, Ltd., English pharmaceutical manufacturing subsidiary of Merck & Co., Rahway, N. J., has acquired all the outstanding shares of the chemical firm, Thomas Morson & Son, Ltd., Ponders End, England.

The Morson company, whose annual sales are more than $1 million, produces a line of fine chemicals for the pharmaceutical and other industries. Its plant, nine miles from the Merck Sharp & Dohme operation at Hoddesdon, occupies a site of nearly seven acres and provides room for expansion.

Morson will be conducted as a separate organization under its own name. Its acquisition will make possible local production of several Merck Sharp & Dohme products.

Market development of these products in England has been limited up to now by import restrictions and lack of basic production facilities in that country. It will also strengthen the export activities of Merck Sharp & Dohme, Ltd.

S. B. Penick Offering Plant-Growth Stimulant

A new plant-growth stimulant, gibberellic acid, is available from S. B. Penick & Co., New York.

Initial work indicates that on certain flowers and ornamentals, gibberellic acid will stimulate stem length and lateral growth, accelerate stem growth on cuttings, increase profusion of blooms, stimulate earlier blooming, promote flowering of plants tending to remain in the vegetative stage, and induce flowering of biennials in the first year.

Antitrust Enforcement Hurt by 'Primary Jurisdiction'

Federal courts are undermining antitrust enforcement policies in the regulated industries by applying a "primary jurisdiction" doctrine to cases involving companies in these fields, the staff of the antitrust subcommittee of the house judiciary committee charged in a report last week.

The "primary jurisdiction" doctrine is the name that has been given to the trend said to be existing in the federal courts of declining to decide antitrust suits against members of regulated industries—railroads, banks, gas utilities, etc.—and of referring such cases to the regulatory agencies for preliminary decision.

The report said that when properly applied, the primary jurisdiction doctrine provides a rule of judicial convenience serving to mark the boundaries between the areas respectively appropriated to court and to agency adjudication, where congress has given jurisdiction to both tribunals. The report added:

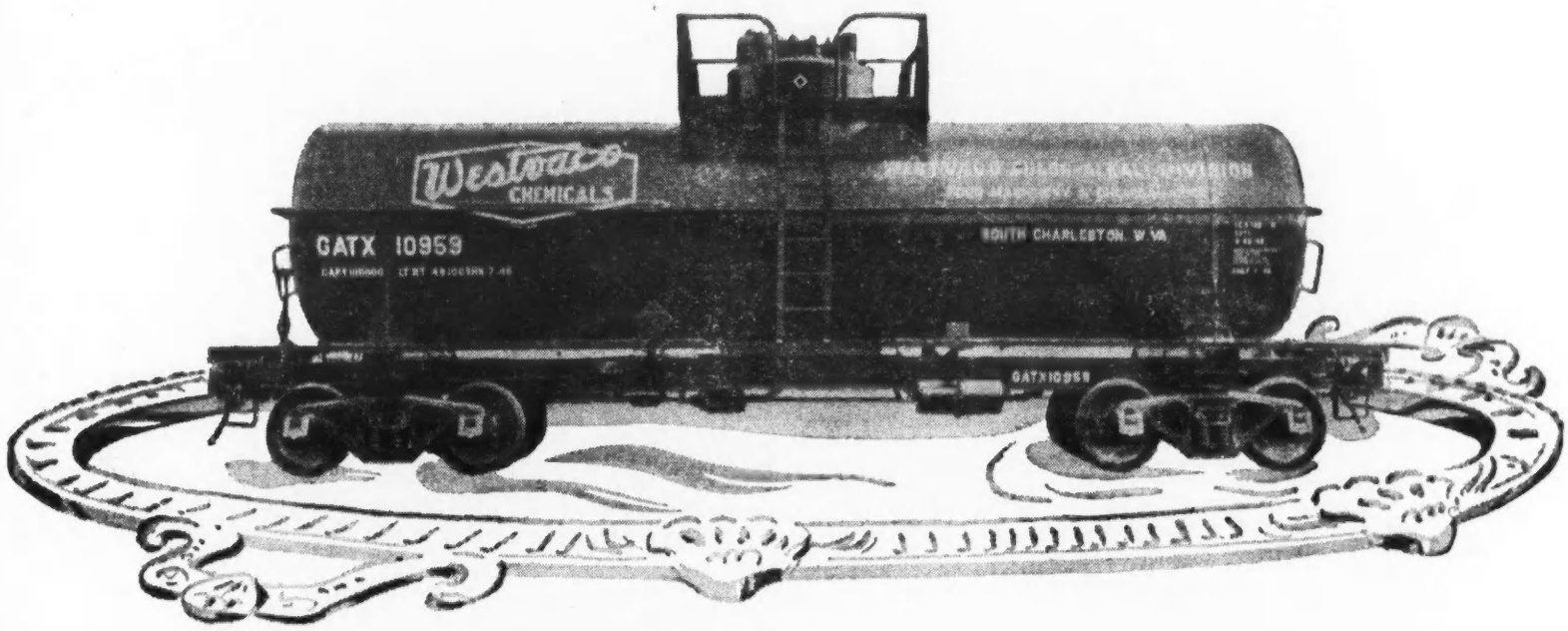
"It appears to the staff that the judicial trend has applied the primary jurisdiction rule to an extent and in a manner not required by judicial convenience or by congressional intent, and that such application of the rule tends to undermine the enforcement of antitrust policies in the regulated industries.

"If the antitrust laws are to be preserved from further judicial impairment, this trend should be halted, and the application of the rule contained within realistic bounds.

"Whatever may be said for the primary jurisdiction rule in private suits, where in-

—Continued on page 63

"the customer is always right"



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Association Meetings

American Pharmaceutical Manufacturers' Association, central section meeting, Edgewater Beach hotel, Chicago, February 11-13.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, February 14.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24.

American Paper & Pulp Association, annual meeting, Waldorf-Astoria hotel, New York, February 17-22.

American Pharmaceutical Manufacturers' Association, western section meeting, Ambassador hotel, Los Angeles, February 18-19; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

American Society of Perfumers, symposium on fragrance, Essex House, New York, March 20.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 16-21.

Association of Consulting Chemists & Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont Plaza hotel, New York, October 22.

Chemical Market Research Association, Sheraton hotel, Philadelphia, March 12-13.

Chemical Progress Week, April 8-12.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Council for Agricultural and Chemurgic Research, annual chemurgic conference, Congress hotel, Chicago, March 26-28

Drug, Chemical and Allied Trades section of New York Board of Trade, annual dinner, Waldorf-Astoria hotel, New York, March 7; annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Federal Wholesale Druggists' Association, midyear meeting, Statler hotel, New York, March 7-9

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Fertilizer Section, Annual Southern Safety Conference, Richmond, Va., March 4-5.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Manufacturing Chemists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., March 4-8

Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Scientific Apparatus Makers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 27-May 2.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 12; annual outing, Skytop Lodge, Skytop, Pa., May 27-29.

Technical Association of the Pulp & Paper Industry, annual meeting, Commodore hotel, New York, February 18-21.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

Synthetic Newcomers Create A Demand On Chemical Industry Bigger Than That of Rayons

The impact of newer synthetic fibers on the chemical industry is much greater than was that of the rayons, which start with natural materials, with the result that the synthetics are creating large markets for both primary and secondary chemicals. That is the finding of Eugene W. K. Schwarz, New York consulting chemist, which was presented last week before the luncheon meeting of the Association of Consulting Chemists and Chemical Engineers in New York.

Much of the demand, Mr. Schwarz said, is for new products, while an increased consumption of established chemicals accounts for other demand. That the heavy demand is only the beginning can be gleaned from the fact that the new synthetics expanded at the rate of more than 40 percent annually for the past twelve years, he said.

Comparison With Other Fibers

This growth, the speaker pointed out, "compares with less than 10 percent for the rayons and practically a standstill for the natural fibers when the population growth is considered."

Mr. Schwarz listed the following as products of primary importance in heavy demand by the synthetic fiber industry: Acetylene, ammonia, benzene, butadiene, calcium and sodium cyanamide, chlorine, furfural, and methane-furfural.

Those of secondary importance, he said, include: Acetaldehyde, acetic acid, acetic anhydride, acrylonitrile, adipic acid, dimethylformamide, ethyleneglycol, ethanol-ethylenedichloride, ethyleneoxide-formaldehyde, terephthalic acid, vinyl acetate, vinyl alcohol, vinyl chloride, and vinylidene chloride.

"Since the world population increases by about 25-30 millions each year and since the supply of natural fibers is inadequate even now, it is easy to see which fibers are destined to grow and which chemicals will grow with them. Let us just recall that viscose rayon drew the curve of carbondisulfide expansion: it used 153 million pounds or 57 percent of total consumption in 1942 and ten years later it used 280 million pounds or 65 percent of consumption. Cellulose acetate also carried the consumption of acetic anhydride along with its own growth: from 141 million pounds or 79 percent of consumption

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RHODIA PERFUMER: Michael J. Hickey, former technical director of the perfume division of Florasynth Laboratories, who has been named perfumer at the New Brunswick, N. J., plant of Rhodia, Inc.

Diamond and Ionics In Research Venture

Formation of a research partnership between Ionics, Inc., Cambridge, Mass., and Diamond Alkali Company, Cleveland, Ohio, was disclosed last week by the two concerns. To bring about this partnership, Diamond has bought 25,000 shares of Ionics stock from the American Research & Development Corporation, Boston, Mass., founder and largest stockholder in the Cambridge company.

In announcing the new relationship, Raymond F. Evans, chairman and chief executive officer of Diamond, said Ionics is "a leader in the field of research and development of various chemical processes, especially those concerned with application of ion exchange technics to the modification concentration or removal of salts from solution."

This new partnership represents "a major extension of our company's research activity," Mr. Evans explained. "Under the arrangement, Ionics will devote all of its uncommitted research efforts to Diamond's interests. It is expected that Ionics will work substantially independently for Diamond's interest on projects suggested by both Ionics and Diamond.

Mr. Evans stated that "while the Ionics

—*Continued on page 63*

Butadiene Process Agreement Is Signed by Esso Research, Dow

Esso Research & Engineering Company has signed a license agreement with Dow Chemical Company, Midland, Mich., to use Dow's type process for making butadiene. Esso Research is the central technical organization of Standard Oil Company (N.J.), New York. The license may be made available to affiliates of Esso Research world-wide. Esso Petroleum, Ltd., a British affiliate of Esso Research, plans to use the process at its new butadiene manufacturing facilities in Fawley, England, which are expected to be in operation in 1958.

The Dow process and catalyst have been in the commercial development stage for several years at Polymer Corporation, Canadian synthetic rubber plant at Sarnia, Canada.

The results of this work and technical know-how, developed jointly by Polymer Corporation and Dow, will be made available to Esso Research.

Dow Type B catalyst is a calcium nickel phosphate material. Its use in butadiene production represents approximately a 20 percent increase in production efficiency

—*Continued on page 56*

Catalyst Unit to Be Expanded by Girdler

Girdler Company, Louisville, Ky., has invested $450,000 in the expansion of its catalyst plant. Girdler is a division of National Cylinder Gas Company, Chicago.

Dr. Ronald E. Reitmeier, manager of the Girdler catalyst department, said the expanded facilities will increase production rates, permit the introduction of new catalysts in the petroleum, chemical and food fields, and improve manufacturing processes.

Latex Paint Output 40 Million Gals. in '56

Latex paint, which was introduced on the market in 1948, was produced at the rate of more than 40 million gallons in 1956, it was estimated last week by Dr. Leland I. Doan, president of Dow Chemical Company, Midland, Mich.

Speaking at the opening of Dow's new western division latex plant at Pittsburg, Calif., Dr. Doan credited creative chemical research and the initiative of progressive paint manufacturers with the trend which is revolutionizing the whole concept of interior painting.

Styrene-butadiene latex, used in 85 to 90 percent of the latex paint manufactured today, is produced from a modification of the process developed by Dow for the World War II synthetic rubber program.

Interior latex paints are only a segment of a broad potential for latexes in the future, according to Dr. Doan. He predicted that "there are many other poten-

—*Continued on page 63*

Drug Test Planned by FDA As Added Safety Measure

The Food and Drug Administration plans to conduct clinical tests on some of the new drugs now on the market as an added check on the safety of such drugs under conditions of widespread use, John L. Harvey, deputy Commissioner of FDA, told an assembly of social, health and welfare workers last week.

This is to be one of the ways by which the agency plans to expand the current operation of its medical division with the increased funds provided for in the budget now before congress. These larger appropriations, amounting to about $1.3

—*Continued on page 56*

Fertilizer Safety Conference Set for Richmond in March

A program has been drawn up for the fertilizer section of the eighteenth annual Southern Safety Conference, to be held March 4 and 5 in Richmond, Va.

Leading off the fertilizer session on Monday afternoon, March 4, will be Quentin S. Lee of the Cotton Producers Association, chairman of the section. "Dollars and Cents in Safety" is the topic of an address by W. D. Smith of Southern States Cooperative, Richmond.

"Safe Handling of Anhydrous Ammonia, Ammonium Nitrate and Ammonium Nitrate Solutions" will be discussed by C. E. Franklin, technical sales representative of Phillips Petroleum Company, Bartlesville, Okla. A talk on "Pile Reduction and the Use of Dynamite" by Stan Roberts of Liberty Mutual Insurance Company, Norfolk, Va., will conclude that session.

The following afternoon, March 5, will

—*Continued on page 63*

Chautemps, Former French Premier, to Address DCAT

Camille Chautemps, Premier of France during 1937-38, will address the thirty-first annual dinner of the Drug, Chemical and Allied Trades section of the New York Board of Trade. The dinner will be held March 7 at the Waldorf-Astoria hotel, New York. Mr. Chautemps will discuss "The Mid-East—Greatest Threat to Western Unity."

SOCMA Luncheon Meeting This Week Stresses Defense

J. Lewis Powell, a member of the staff of the assistant Secretary of Defense for supply and logistics, will be the featured speaker at this week's luncheon meeting of the Synthetic Organic Chemical Manufacturers Association. Mr. Powell's topic will be "The Collapse of Time: Defense Planning for Industry." The meeting will be held February 14 at the Roosevelt hotel, New York. Cocktails will be served at noon, with luncheon following at 12:30 p.m.

Nylon Artery for Human Use Made by Chemstrand

A new type Y-shaped nylon artery graft for use in human surgery has been announced by Chemstrand Corporation, Decatur, Ala., an associate company owned by Monsanto Chemical Company and American Viscose Corporation.

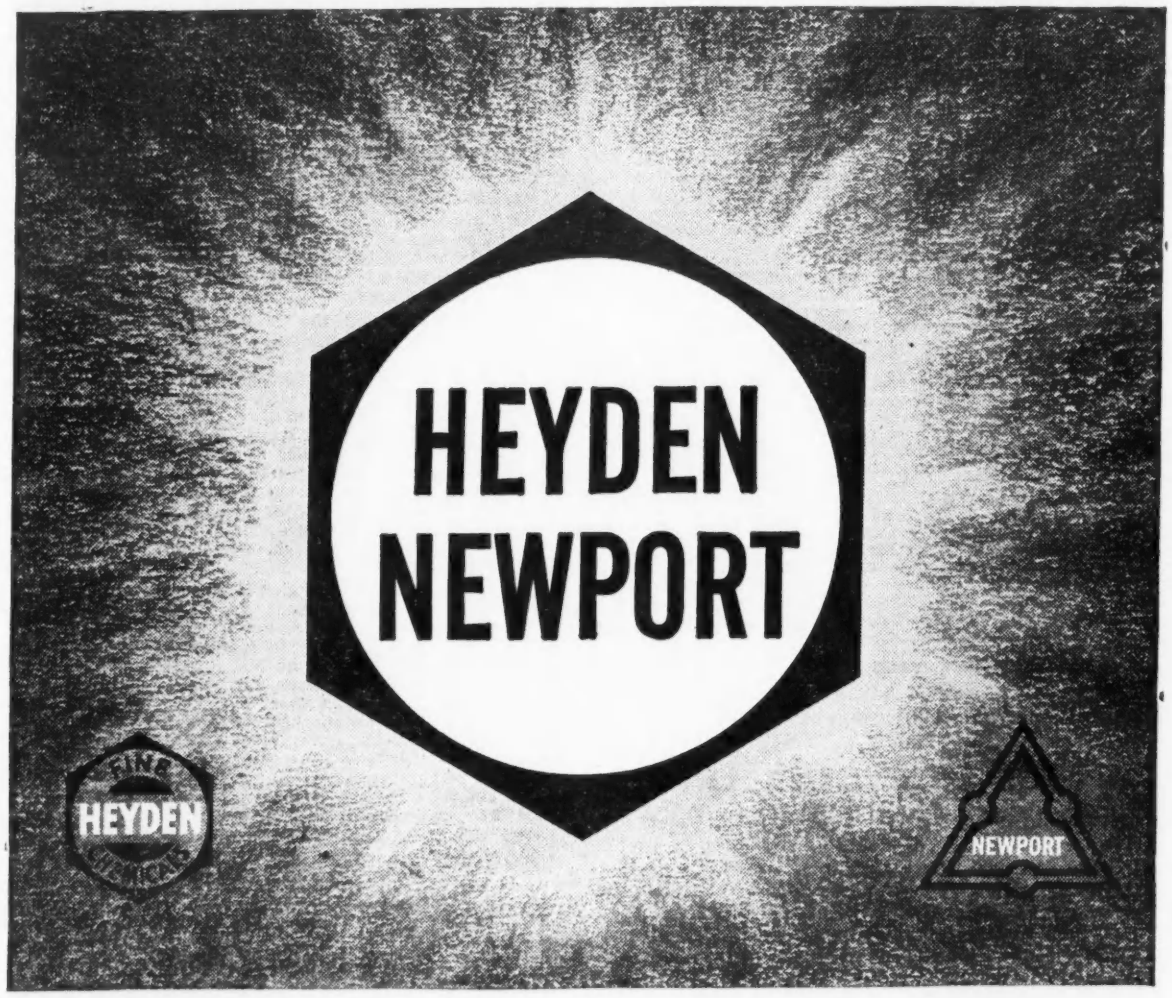
The tube, which is described in the current issue of *Monsanto Magazine*, has opened areas of surgery that had been closed except for rare operations in which another human artery was substituted for a diseased one.

The "Y," or aortic bifurcation graft, was perfected by Dr. W. Sterling Edwards, of Alabama Medical College, Birmingham, Ala,. and Dr. J. S. Tapp, of the research and development center of Chemstrand.

It is an outgrowth of the nylon "no-kink artery," developed by the two men, which has replaced occluded, weakened or damaged arteries successfully in more than 500 cases during the past two years.

Significance of both the "Y" graft and "no-kink artery" becomes apparent, it was pointed out, when the high incidence of death due to coronary thrombosis or occlusion is considered: One in three deaths among American men over forty-five years old is attributable to this killer.

Use of this man-made substitute is not limited to diseased arteries. Drs. Edwards and Tapp see nylon grafts eventually playing an equally important role as a replacement for damaged arteries.



Industry's newest chemical trademark

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Heyden Chemical Corporation, a leading producer of organic chemicals for over half a century—pioneer in the commercial production of such important chemicals as formaldehyde, salicylates, benzoates, pentaerythritols and many others—now combines the forces and facilities of *Newport Industries, Inc.*, a major producer of naval stores, tall oil fatty acids and rosins, and well-known manufacturer of fine chemicals derived from wood.

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, February 8 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
l.c.l., works lb. .13½- —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
ton lots lb. .31½- —
smaller lots lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81
Acetic anhydride, aluminum ret., dms., c.l., dlvd. E lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd. lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .10½- —
l.c.l., dlvd lb. .11½- —
tanks, dlvd lb. .08 - —
Methyl (see MD).
Acetonitrile, dms., c.l., works lb. .43 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 1.19
Acetophenone, cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E of Denver lb. .36 - —
l.c.l., frt. alld. E of Denver lb. .35 - —
tanks frt. alld. E at Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt alld E of Denver. lb. .40 - —
tanks, frt. alld. E. of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l., works lb. .06½- —
l.c.l., works lb. .07 - .07½
Acetic, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs. 22.00 - 23.00
tech, dms. c.l., dlvd 100 lbs. 13.75 - —
l.c.l., dlvd. 100 lbs. 14.25 - —
tanks, dlvd 100 lbs. 10.00 - —
USP cbys., inclusive, dlvd., 100 lbs. 31.00 - 32.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd. (60 mesh) bbls. 1,000-lb lots, same basis lb. .58 - .58
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila. Midland, Mich. Chicago and St. Louis.
Adipic, bgs., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .34¾- —
Aminoacetic, NF, bbls., frt. adjusted lb 1.50 1.75
p-Aminobenzoic, tech. dry, dms., works lb. 1.74 1.77
USP, dms. 1,000-lb. lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic, dms. 100 lbs or more, frt adjusted lb 3.70 - —
Anthranilic, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Arsenous, tech (see Arsenic, white).
USP (see Arsenic trioxide)
Ascorbic, USP, dms. 25-100 kilo lots kilo. 12.00 - —
10-kilo lots kilo. 12.35 - —
5-kilo lots kilo. 12.75 - —
bots. 1-kilo lots kilo. 13.00 - —
500-gram lots kilo. 13.50 - —
Battery, cbys., c.l., works, E. 100 lbs 2.35 —
l.c.l. works, E. 100 lbs. 2.65 3.45
Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms. 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton. 129.00 - —
ton lots, ex whse., N. Y. or Chi ton. 184.25 - —
smaller lots, same basis. ton. 189.25 - —
dms., c.l., works ton. 153.50 -173.50
ton lots, ex whse., N. Y. or Chi ton. 208.75 -228.75
smaller lots, same basis. ton. 213.75 -233.75
gran., bgs., c.l., works ton. 104.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis. ton. 164.25 - —
dms., c.l., works ton. 128.50 -148.50
ton lots, ex whse., N. Y. or Chi ton. 183.75 -203.75
smaller lots, same basis. ton. 188.75 -208.75
bulk, c.l., works ton. 98.00 - —
Boric, tech., 99.9% powd., bgs., c.l., works ton. 109.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis. ton. 164.25 - —
dms., c.l., works ton. 133.50 -153.50
ton lots, ex whse., N. Y. or Chi ton. 188.75 -208.75
smaller lots, same basis. ton. 193.75 -213.75
USP boric acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., frt. equald. lb. .34 - —
l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Capric, dms lb. .25 .27
Caprylic, dms lb. .25 .27
Cassella, dms., frt. alld., 100% basis lb. 1.44 1.75
Castor oil, dms lb. .17¾- .19¾
Chicago paste, bbls. frt. alld lb. 3.21 - —
Chloroacetic, mono purit., flake, 99% dms lb. .23½- .25½
tech. flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib dms., t.l., works lb. 1.10 - —
smaller lots, works lb. 1.25 - —
Acid, p-chlorobenzoic, fib. dms., 2,000 lbs. or more, works lb. 2.25 - —
less than 2,000 lbs., same basis. lb. 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c per lb higher.
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
l.c.l., dlvd. N. Y., Metropolitan area lb. .30 - .31
NF (see Chromium trioxide).
Cinnamic, refd., bots lb. 2.50 3.50
Citric, USP, anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½- .30
10,000-lb lots, 1 shipt. lb. .30 - .30½
smaller lots lb. .30½- .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½- .28
10,000-lb lots, 1 shipt. lb. .28 - .28½
smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. 1.03 - —
Coconut oil, dist., dms lb. .23½- .25½
tanks lb. .21½- —
dbl. dist., dms lb. .24½- .26½
tanks lb. .22½- —
Corn oil, dist., dms lb. .16¾- .18½
tanks lb. .14¾- —
Cottonseed oil, dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —
2,3-Cresotic, dms., ton lots, works. lb. .70 - —
smaller lots, works lb. .72 - —
Cresylic, coaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt. equald. gal. 1.10 - —
204° to 207° C., tricresyl phosphate grade, tanks, frt. equald. gal. 1.10 - —
204° to 207° C., resin grade, tanks, frt. equald. gal. 1.20 - —
non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
l.c.l., frt. equald gal. 1.19 - 1.20
tanks, frt. equald gal. 1.00 - —
Imp., 75% at 215° C. or over, dms., ex whse gal. .93 - —
petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l., same basis gal. .82 - .84
tanks, same basis gal. .65 - —
200° C to 222° C., tanks, Wilmington, Cal lb. .63 .73
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
l.c.l., same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 .67
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib. dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech., bbls. lb. .90 - 1.25
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital).
Diglycolic, bgs., works lb. .14 - —
Dithiodibenzoic, dms., 1,000-lb. lots, works lb. 1.45 - —
2-Ethyl hexoic, dms., c.l., dlvd. lb. .37 - —
l.c.l., dlvd lb. .38 - —
tanks, dlvd lb. .34½- —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns., kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775
Fumaric, tech., bgs., dms., c.l., frt. alld. E lb. .27 - —
l.c.l., same basis lb. .28 - —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Gallic, NF VII, bbls. 1,000-lb. lots. lb. 2.00 - —
smaller lots lb. 2.02 - 2.22
tech., bbls., 1,000-lb. lots lb. 1.78 - —
smaller lots lb. 1.80 - 2.00
Gamma, dry, grd. bbls., frt. alld. lb. 1.50 - —
paste, bbls., frt alld lb. 1.45 - —
Gluconic, tech., 50%, bots., works, lb. .25 - 1.16
non-ret. dms., c.l., works lb. .15½- —
1-dm. lots, works lb. .16 - —
l-Glutamic, 99½% fib. dms., 100-lb. lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., frt. alld., 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys. lb. 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydrobromic, medicinal, 48%, cbys., dlvd. E lb. .37 - .43
Hydrochloric, anhyd. (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 26.00 - —
20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
l.c.l., same basis lb. .17¼- .17¾
5-pint bots. extra, cs., c.l., same basis lb. .20¾- —
l.c.l. same basis lb. .22¼- .23¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb. less.
Hydrocyanic, cyls. c.l. dlvd. lb. .70 - —
l.c.l., same basis lb. .75 - .90
dilute, NF, 2%, 5-lb. bots. lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
l.c.l., l.t.l., dlvd 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
l.c.l., l.t.l., dlvd 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic, dms., works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .093 - —
Hypophosphorous, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys. lb. .88 - —
Isonicotinic, 100-lb. fib. dms., works lb. 4.25 - —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb. .44 - —
l.c.l., works lb. .45 - —
purif., fib. dms. c.l., works lb. .54 - —
l.c.l., works lb. .55 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
		dms.	drums	nom.	nominal
anhyd.	anhydrous	dom.	domestic	o-	ortho
a.p.a.	available phosphoric acid	E.	east	ord.	ordinary
		e.p.	end point	oz.	ounce
approx.	approximately	equald.	equalized	p-	para
artif.	artificial	exp.	expressed	Pac.	Pacific
ASTM	American Society for Testing Materials	F.	fahrenheit	pf.	proof
		ferment.	fermentation	phos.	phosphate
		f.f.a.	free fatty acid	photo.	photographic
Atl.	Atlantic	f.f.c.	free from chlorine	pkgs.	packages
Be.	Baume			powd.	powdered
bbls.	barrels	fib.	fiber	precip.	precipitated
bgs.	bags	f.o.b.	free on board	prod.	producer
bls.	bales	f.p.a.	free of prussic acid	pt.	point
bots.	bottles			pulv.	pulverized
b.p.	boiling point	frt.	freight	purif.	purified
b.p.l.	bone phosphate of lime	gal.	gallon	redist.	redistilled
		gran.	granular	refd.	refined
b.r.	boiling range	grd.	ground	refy.	refinery
bxs.	boxes	i.&a.	iron and aluminum	reg.	regular
C.	centigrade			resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured			SD	specially denatured
		imp.	imported		
c.i.f.	cost insurance, freight	incl.	included	s.d.	single distilled
		indust.	industrial	S. E.	southeast
				sec.	secondary
cks.	casks	kgs.	kegs	secs	seconds
c.l.	carlots	l-	laevo	s.g.	specific gravity
cns.	cans	lacq.	lacquer	ship't	shipment
coml.	commercial	lb.	pound	soln	solution
conc.	concentrated	l.c.l.	less than carlots	s.u.	standard unit
CP	chemically pure	l.t.l.	less truckload	syn.	synthetic
		liq.	liquid	tanks.	railroad tankcars
cps.	centipoises	mfrs.	manufacturers	tech.	technical
cryst.	crystal	m-	meta	tert-	tertiary
cs.	cases	m.a.p.	mixed aniline point	t.l.	truck loads
ctns.	cartons			t.w.	tank wagons
cyls.	cylinders	min.	minimum	USP	U. S. Pharmacopoeia
d-	dextro	m.p.	melting point		
dbl.	double	N-	nitrogen	vis.	viscosity
denat.	denatured	n-	normal	VM&P	varnish makers & painters
dest-dist	destructive-distilled	nat.	natural		
		neut.	neutral	W.	west
dl-	dextro-laevo	NF	National Formulary	whse.	warehouse
dist.	distilled			w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

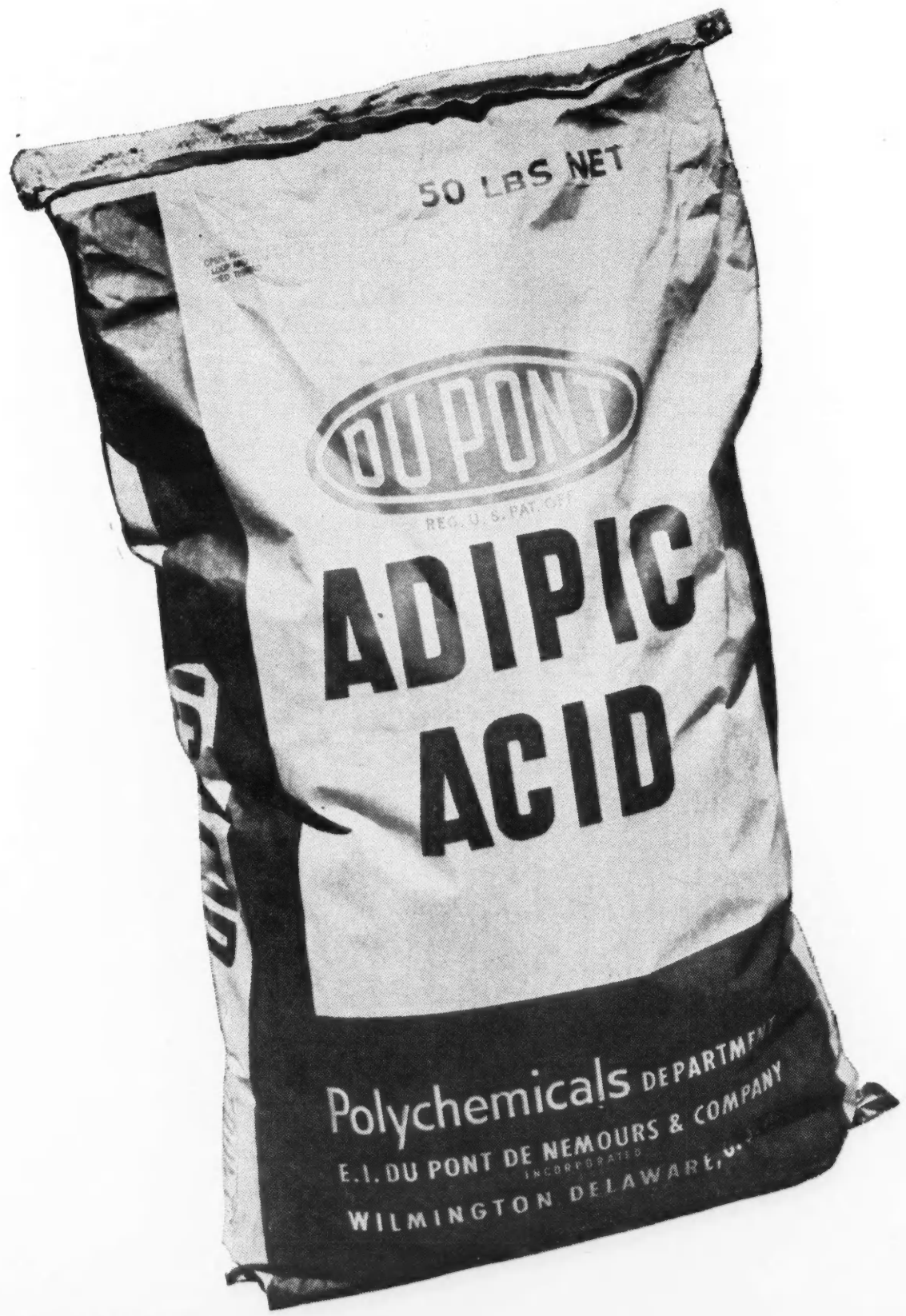
Acid J—Alcohol, n-Butyl

Acid, J, paste, bbls., works, 100% USP, 85%, cbys. .. lb. .85 - .88
basis lb. 2.45 - —
powd. bbls., sam basis lb 2.50 - 2.85
Koch, bbls. frt. alld., 100% basis. lb. 1.00 - —
L, bbls. works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots lb. .1921- .225
80%, bbls., 5 or more .. lb. .3121- .37
smaller lots lb. .3171- .375
plastic grade 50%, bbls., 20 or more works lb. .23 - —
1 to 19 .. lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech. 22% bbls. c.l., works 100 lbs 6.30 - —
t.c.l. works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 - 11.95
t.c.l. works ... 100 lbs. 11.85 - 12.35
Laurent's, bbls lb .69 - —
Lauric, 90% dms lb. .26½- .38½
Linseed oil, dist., dms lb. .1980- —
w.w., dms lb. .2280- —
Maleic cryst. powd. dms .... lb. .37 .38
Malic, tech., dms lb. .50 - —
Mandelic NF dms. 1,000-lb lots. lb 2.35 - —
smaller lots lb 2.40 2.50
Metanilic, dms., works lb .57 .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works .... lb. .47½- .80
tanks, works .... lb 45 - —
Molybdic, 85%, dms., works .... lb. 1.20 - —
Monochloroacetic purif (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms .... lb .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt. alld. lb. 1.30 - —
Nicotinic USP dms., dlvd kilo. 8.00 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be cbys. c.l., works, E 100 lbs. 5.75 - —
t.c.l., works, E .... 100 lbs. 6.05 - 6.85
38° Be. cbys., c.l., works, E. 100 lbs. 6.25 - —
t.c.l. works, E .... 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 - —
t.c.l. works, E .... 100 lbs 7.05 - 7.85
42° Be, cbys., c.l., works, E. 100 lbs. 7.25 - —
t.c.l., works, E .... 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
t.c.l., same basis lb. .20 - .20½
5-pt. bots., extra, cs., c.l., same basis lb. .22½- —
t.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms, c.l., works. lb. .72 - —
t.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .17¾- .19¾
tanks lb. .15¾- —
dbl. dist. (white), dms.... lb. .19¾- .21¾
tanks lb. .17¾- —
Oleum (see Acid, sulfuric fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls, c.l., works lb. .16½- —
10,000-lb lots, works .... lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, fib dms, 250 lbs. or more, frt. alld lb 1.14 1.17
Palm dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld. .... lb 1.35 - —
paste, frt. alld. .... lb 1.30 - —
Phenylacetic, pure, cryst., cns. lb 1.45 - 1.75
Phenylcinchoninic (see Cinchophen)
Phenylglycolic (see Mandelic).
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs 6.75 - —
t.c.l., same basis 100 lbs 7.00 - 7.50
tanks, works 100 lbs 5.35 - —
80%, cbys. c.l., frt. alld 100 lbs 7.60 - —
t.c.l. works ... 100 lbs 7.85 - 9.10
tanks, works .... 100 lbs 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
c.l., works lb. .0850- .0875
tanks works lb .0640- —
Picric, NF, bbls lb. .85 - —
tech., bbls lb. .44 - —
Propionic, syn., pure, dms., c.l., works lb. .22¾- —
l.c.l., works lb. .23¾- —
tanks, works lb. .20¾- —
Pyrogallic, NF (see Pyrogallol) tech., bbls lb. 3.17 - 3.25
Ricinoleic (see Acid, castor oil, split).
S., bbls, works lb 3.25 - —
Salicylic, crude fib dms, c.l., frt. alld lb 35 - —
l.c.l., frt. alld, on 100 lbs. or more lb 36 - —
sublimed, tech., fib dms., c.l., dlvd lb. 37 - —
t.c.l., dlvd. lb 41 - —
USP, cryst., fib dms lb 48 - —
powd., fib dms lb 55 - —
Sebacic, purif., dms, c.l. works lb 64 - —
l.c.l., works lb 66 - .70
Soybean oil, dbl. dist., dms lb 18¾ .20¾
tanks lb .16¼ - —
s.d. dms lb 17¼ .19¼
tanks lb 15¼ - —
Stearic, dbl. pressed, bgs lb 15¼ .17¼
single pressed, bgs .... lb 14¾ 16¾
triple pressed, bgs lb 17½ 19½
Succinic, purif., cryst., bbls, works lb 62 .75
Sulfanilic, tech., dms, c.l., frt. alld lb 21 - —
l.c.l., frt. alld ... lb. .23 - —

Acid, sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
t.c.l., works 100 lbs. 2.45 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works, 100lbs. 2.25 - —
t.c.l. works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
98%, tanks, works ton. 23.50 - —
99-100%, tanks, works ... ton. 23.95 - —
CP, NF, consumers, frt. equald. lb. .12¾- —
t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., cl., works, frt. alld lb. .16¼- —
t.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20%, tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks, works ton. 39.50 - —
Tall oil, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½- .08
Tallow dist., dms lb. .15¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF fluffy bbls., 1,000-lb. lots lb 2.05 - —
smaller lots lb 2.06 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
smaller lots. lb. 1.96 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt. lb. .49½- —
smaller lots lb. .50 - —
100-lb. dms lb. .51 - —
imported, bgs lb. .42 - .45

Acid, thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
l.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l. lb. .90 - —
125 lbs. to t.l. lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic, bbls., works lb .92 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works lb. 3.15 - 3.50
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works. lb. .47 - —
l.c.l. works lb. .47½- —
tanks works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
l.c.l., l.t.l., frt. equald lb. .32 - —
tanks, frt. equald lb. .28 - —
ACTH, cryst. bulk, 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - —
powdered, 30 mesh, fib., dms lb. 2.75 - —
dl-Alanine dms., works lb 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms lb. .65 - 1.00
Egg, edible, cryst., powd., bbls. lb. 1.53 - 1.58
flake lb. 1.49 - 1.54
tech., cryst., bbls lb. 1.08 - 1.10

Alcohol, allyl, dms., c.l. dlvd.... lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms. l.c.l., dlvd lb. .43 - —
ACS grade, dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½- —
l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld E lb. .16 - —
1-pentanol, (syn normal), dms., c.l. works lb. .41½- —
l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment, dms., c.l., frt. alld lb. .16½- —
l.c.l., frt. alld lb. .17½- —
tanks, frt. alld lb. .14 - —
syn., dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 - —



Alcohol, n-butyl, tert-synthetic, dms., c.l., frt. alld..lb. .14 - —
l.c.l., frt. alld..lb. .15 - —
tanks, frt. alld..lb. .12 - —
Capryl, 85%, dms., c.l. and t.l., works..lb. .19 - —
l.t.l., same basis..lb. .19½- —
tanks, frt. equald..lb. .16½- —
sec., 92-99%, dms., c.l..lb. .22 - —
l.c.l..lb. .23 - —
tanks..lb. .19½- —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib. cns., 140-lb. lots or more lb. .65 - —
Cinnamic, bots..lb. 2.15 - 2.75
Decyl mixed isomers, dms., c.l., dlvd..lb. .23½- —
l.c.l., dlvd..lb. .24½- —
tanks, dlvd..lb. .21 - —
perfume grade, bots..lb. 1.75 - 2.00
normal (see 1-Decanol).
Denat. CD-12, CD-13 CD-14, CD-17, dms., c.l., dlvd. E of Rockies gal. .64½- .66
l.c.l., same basis gal. .69½- .77
tanks, dlvd., same basis, gal. .48½ .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
SD1, dms., dlvd. E. of Rockies, gal. .65½- —
l.c.l., same basis..gal. .70½- .76½
tanks, same basis..gal. .49½- —

Alcohol, denat., SD1, dms., c.l., dlvd. E. of Rockies..gal. .64 - —
l.c.l., same basis..gal. .69 - .75
tanks, same basis..gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies..gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis..gal. .47 - —
SD23A, dms. c.l. dlvd. E. of Rockies gal. .655 - —
l.c.l., same basis gal. 705 - .763
tanks, same basis gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l. same basis gal. .695 - .755
tanks, same basis..gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD35A, dms., c.l. dlvd. E of Rockies..gal. .66 - —
l.c.l., same basis..gal. .71 - .77
tanks, same basis..gal. .50 - —
For anhydrous alcohol, on above formulas, prices are 7c. per gallon higher.
SD40, dms., c.l., dlvd. E. of Rockies..gal. .64 - —
l.c.l., same basis..gal. .69 - .75
tanks, same basis..gal. .48 - —
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Alcohol, diacetone, acetone-free, dms., c.l., dlvd..lb. .13 - —
t.c.l., dlvd..lb. .16 - —
tanks, dlvd..lb. .125 - —
tech., dms., c.l. dlvd..lb. .145 - —
l.c.l., dlvd..lb. 1.55 - —
tanks, dlvd..lb. .12 - —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal.20.58 - —
c.c.l. same basis gal.20.63 -20.69
tanks same basis gal.20.42 -
tax free, dms., c.l., dlvd. E. of Rockies gal. .63 - —
t.c.l. same basis gal. 68 - .74
tanks, same basis gal. .47 - —
absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies..gal.21.70 - —
l.c.l., same basis....gal.21.75 -21.81
tanks, same basis....gal.21.54 - —
2-Ethylbutyl, dms. c.l. works lb. .30 - —
l.c.l. works..lb. .30¾- —
tanks, works..lb. .28 - —
2-Ethylhexyl, dms., c.l. dlvd. E.lb. .24¼- —
l.c.l. same basis..lb. .25¼- —
tanks, same basis..lb. .21¾- —
Furfuryl cns. works..lb. .29 - —
dms., c.l., Memphis, Tenn....lb. .20 - —
Newark N J..lb. .21½- —
l.c.l., Memphis Tenn..lb. .21 - —
Newark N J..lb. .22½- —
tanks, Memphis Tenn lb. .184 - —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd..lb. .29¼- —
t.c.l., dlvd..lb. .29¾ .30¼

Alcohol, hydroabietyl, tech., solid, Zone 1, tanks, dlvd...lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.
Isoamyl, dms. c.l. works, frt alld E lb 28 —
t.c.l. same basis lb 29 —
tanks same basis lb 25 —
Isobutyl, dms., c.l., dlvd..lb. .15½- —
t.c.l. dlvd..lb. .16½- —
tanks, dlvd..lb. .13 - —
iso-octyl, dms., c.l., dlvd. E lb. 23½- —
t.c.l. dlvd E lb. 24½- —
tanks, dlvd E lb. 21 —
Isopropyl, refd. 91%, dms., c.l., dlvd gal. .53 - —
t.c.l. dlvd gal. 60 - —
tanks, dlvd gal. .37 - —
95%, c.l. dlvd gal. .55 - —
t.c.l. dlvd gal. .62 - —
tanks, dlvd gal. 39 - —
99%, dms., c.l., dlvd gal. .57 - —
t.c.l. dlvd gal. .64 - —
tanks, dlvd gal. .41 - —
Lauryl, bots..lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech (see Octanol, normal)
2-Phenylethyl, extra, dms lb 1.14 - 1.45
standard, dms lb. 1.10 - 1.60
n-Propyl, dms., c.l., dlvd..lb. .13½- —
l.c.l. dlvd..lb. .14½- —
tanks, dlvd..lb. .11 - —
Tetrahydrofurfuryl, dms., c.l or t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l or t.l., f.o.b Memphis, Tenn lb. .38 - —
t.o.b. Newark, N. J lb. .40 - —
tanks, dlvd E of Denver lb. .365 - —
dlvd W of Denver lb. .375 - —
Tridecyl mixed isomers, dms., dlvd lb. .26½- —
t.c.l. dlvd..lb. .27½- —
tanks, dlvd..lb. .24 - —
Wood (see Methanol).
Aldol, 95%, dms., works lb .23 - —
denaturing grade dms gal 2.15 - —
Aldrin tech. fib dms. c.l., t.l., dlvd..lb. .90 - —
l.c.l., dlvd..lb. .95 - 1.05
Aletris root, bgs lb 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone)
Allethrin 90% dms. frt alld lb.28.80 -28.90
soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 - 6.55
2½% dms. frt alld lb 93 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works..lb. 1.45 - 1.50
Chloride dms. c.l., dlvd..lb. .17 - —
t.c.l. dlvd..lb. .18 - —
tanks dlvd..lb. .15 - —
Aloe, Cape, cs..lb. .50 - —
powd., cs..lb. .65 - —
Curacao kgs..lb. .60 - —
Aloin, USP, bbls., dms., kgs..lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium gran. bgs., works..100 lbs. 4.30 - —
lump dms. works 100 lbs 5.05 - —
powd., dms., works..100 lbs. 5.20 - —
USP, burnt, dms..lb. .20 .21
hydrous dms lb 07¾ 08
Potassium, gran., bgs., works, 100 lbs 4.55 —
lump, dms. works 100 lbs 5.30 —
powd. dms. works..100 lbs 5.45 —
USP, burnt dms..lb. .20 .21
hydrous, dms..lb. 07¾ 08
Potash-chrome dms..lb. 17 —
Alumina calcined bgs. c.l., works. lb. .0455- —
l.c.l., works lb. 048 .0753
Aluminum acetate basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Chloride com'l, anhyd. dms., c.l., works, frt. equald lb. 16 - —
l.c.l. works, frt. equald.lb. 16½- —
cryst., dms., c.l., works..100 lbs.16.00 - —
l.c.l., works 100 lbs.17.50 —
soln. 32° cbys, c.l. works lb. .0445- —
l.c.l., works lb. 0520- .1290
tanks, works 100 lbs. 3.45 —
NF, gran., dms., works lb. 29 .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
t.c.l., works lb. .17¾ .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb 12 —
t.c.l. works lb. 12½- —
Hydrate, heavy, bgs., c.l., frt. frt. equald lb. .032 —
20,000-40,000 lb. lots, same basis lb. .0345- —
2,000-20,000 lb lots, same basis lb. .0445- —
bulk, same basis lb. .0295- —
Hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. 22 - —
contract works lb. 21 —
Gel, 9-9½% Al_2O_3, fib. dms., works..lb. .19 - —
contract works lb 18 —
dried, USP XIV, fib. dms., works lb. .82½- —
contract works lb. 79½- —
tech. powder (see Aluminum hydrate)
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2710- —
pigs 10,000-lb lots frt alld. lb. .2500- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine dms lb. .68 - —
standard grade dms lb. 48 - —
Powder, lining extra, fine, dms..lb. 1.09 - —
standard grade dms lb. 78½- —
Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb. for 100-lb dm., 1½c. per lb for 50-lb dm., 3c. per lb. for 10-lb can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 20,000 lbs. and 4c for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.
Resinate, precip., 2.1% Al dms., lb. .33 - —
Stearate, dibasic, ctns., c.l.,..lb .39 - .44
l.c.l. ..lb. .40 - .44
monobasic, ctns., c.l. ..lb. .39 - —
l.c.l. ..lb. .40 - .44
tribasic, ctns., c.l. ..lb. .39 - —
l.c.l. ..lb. .40 - .44
Sulfate, comi., bulk, c.l. works. 100 lbs 1.85 —
grd., bgs. c.l., works ton.37.00 —
lump bgs. c.l., works ton.40.00 —

Du Pont chemical experience is the reason...

You get unvarying high quality in every bag of Du Pont Adipic Acid

Du Pont, the chemical industry's first producer of adipic acid, maintains its high-quality standards with the latest manufacturing processes and production techniques.

You benefit from Du Pont's 20 years of experience as a producer of high-quality adipic acid. For shipment after shipment, you can depend on a product that meets your most exacting specifications . . . whose purity and uniformity are always the same. This means you can count on a smoother-running operation . . . with costly production halts cut to a minimum.

What's more, uses for versatile Du Pont Adipic Acid continue to grow. In addition to applications in many phases of petroleum and chemical manufacture, Du Pont Adipic Acid is widely used in the production of high-quality adipate plasticizers, polyester resins, and polyurethane foams.

If adipic acid is an ingredient in your process, consider the many advantages you gain from Du Pont's experience in producing this basic chemical. Remember, too, that there is a strategically located stock point near your plant ready to ship Du Pont Adipic Acid (packaged in 50-lb. multi-ply paper bags) on receipt of your order. For more information, call or write our nearest district office . . . you will receive a prompt response.

POLYCHEMICALS DEPT. DISTRICT OFFICES

New York 1, New York
350 Fifth Avenue
Tel: Longacre 3-6400

Chicago 30, Illinois
7250 N. Cicero Ave., Lincolnwood
Tel: Ind. 3-2570

Detroit 35, Michigan
13000 West Seven Mile Road
Tel: Unl. 4-1963

Los Angeles 58, California
2930 East 44th Street
Tel: Cumberland 3-2761

FORMULA:

$(CH_2)_4(COOH)_2$

TYPICAL ANALYSIS:

Adipic Acid.....99.8%
Ash.....5 p.p.m.
Iron.....0.5 p.p.m.
Water.....0.05%
Color, A.P.H.A.....6

DU PONT
REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

POLYCHEMICALS DEPARTMENT

E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware

Aluminum sulfate, iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.55 - —
l.c.l. works, frt. equald. 100 lbs. 3.95 - 4.55
Aluminum sulfate prices $1 per ton higher in the South.
USP, gran., dms., works lb. .29 - .30
powd., dms., works lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. lb. 1.57 - —
Aminoazotoluene base, bbls., 100% basis lb 1.03 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
l.c.l. dlvd lb. .485 - —
tanks, dlvd lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
l.c.l. frt. alld lb. .45 - —
tanks, frt. alld lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
smaller lots lb 2.50 - —
p-Aminophenol, dms., frt. alld lb 1.15 - —
Aminophylline, USP 100-lb dms lb 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.80.00 - —
refrigeration, tanks works, frt equald ton.82.50 - —
aqueous, tanks, works, anhyd. basis ton.83.00 - —

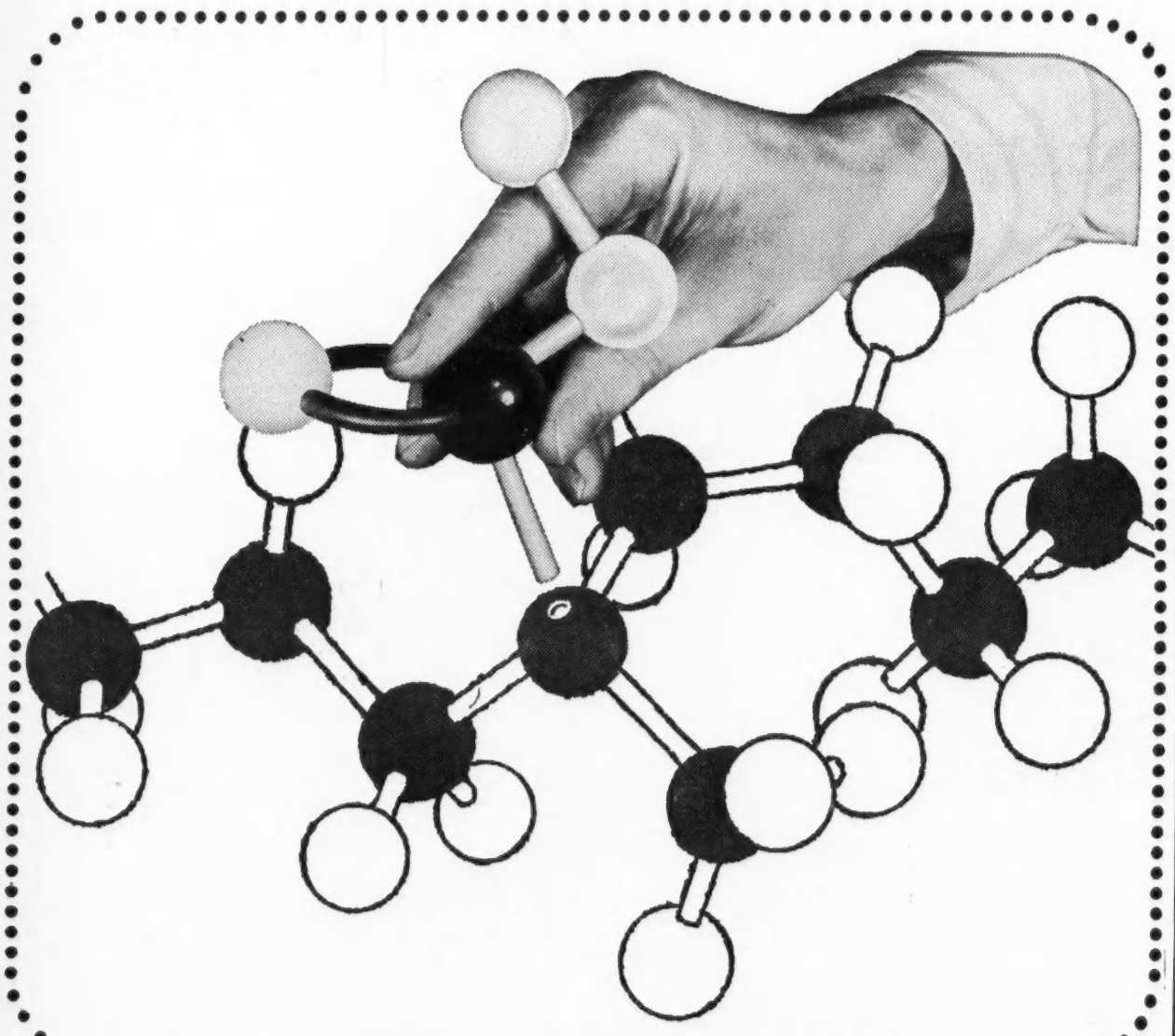
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 9.25 - —
white (see Ammonium chloride tech.).
Ammonium acetate, purif., dms lb. .41 - —
Benzoate USP dms., kgs. 4,000-lb. lots frt. alld lb. .80 —
smaller lots, frt. alld lb .81 1.08
Biborate, gran., dms., c.l., works. ton.319.50 —
ton lots, ex whse ton.397.00 - —
smaller lots, ex whse ton.402.00 - —
Bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 9.00 - —
Bichromate, dms., works lb 42 .43
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide, NF, gran., bbls lb. .43 —
Powdered ammonium bromide 10c per lb. higher.
Carbonate, USP, lump, dms. lb. .16 - —
Chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 —
l.c.l., works 100 lbs. 7.75 8.20
USP, gran., bbls., dms lb. .17¼- —
Citrate, dibasic, bbls lb. .77 —
Dichromate (see Ammonium bichromate)
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqueous)
Hypophosphite, NF, dms. lb. 3.07 —
Iodide, NF, dms., bots lb 4.26 4.36
Linoleate, 60%, dms., works lb. .50 .55

Ammonium nitrate, dom., fert. grade, 33.5% N., bgs., western works, frt. equald., base price ton.64.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price ton.64.00 - —
August discount ton. 5.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va ton.51.00 - —
Oxalate, fine gran., dms lb. .26½- .31
Pentaborate, gran., bgs., c.l., works ton.187.50 - —
ton lots, ex whse ton.273.50 - —
smaller lots, ex whse ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher.
Persulfate, kgs lb. .38 - .47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 - —
dibasic, NF, V bbls, dms lb. .46 - —
tech. bgs. c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 - —
Salicylate, NF, dms., kgs. lb. 1.62 - 1.64
Silicofluoride, dms., works lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 - —
syn., bulk, c.l. f.o.b. works ton.32.00 -42.00
purif., dms., works lb. .10 - .10½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).

Ammonium thiocyanate, c.l., works lb. .20 - —
l.c.l., works .25
Thioglycollate, com. 100% basis lb 1.35 1.65
highly purif., cbys., 100% basis. lb. 1.70 - 1.90
Thiosulfate, cryst., photo grade, fib dms. frt. alld lb. .65 —
d-Amphetamine hydrochloride, dibasic bots lb.28.00 - —
dl, dms lb 6.00 - —
d-monobasic, bots lb.28.00 - —
d-Phosphate, dibasic, bots lb.28.00 - —
dl, dms lb 6.00 - —
d-Sulfate, dms lb.28.00 - —
dl, dms lb 6.00 —
Amyl acetate ex fusel oil, tech., dist. from 125° to 150°C, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
syn., oxo process, dms., c.l., dlvd lb. .19¾- —
l.c.l., dlvd lb. .20¾- —
tanks, dlvd lb. .18 - —
ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
l.c.l., dlvd lb. .19½- —
tanks, dlvd lb. .16 - —
tech., dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
Alcohol (see Alcohol, amyl).
n-Butyrate, dms lb. 1.00 1.25
Cinnamic, aldehyde, dms lb. 1.70 - 2.20
Nitrite, USP, bots lb 1.75 1.83
Salicylate, cns., dms lb. .82 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
l.c.l., works lb. .50½- —
tanks, works lb. .47 —
p-tert-Amyl phenol, dms., c.l., works. lb. .26¾- —
l.c.l. works lb. .27¾- —
tanks, works lb. .25¾- —
Anethole, cns., dms lb. 1.60 - 1.80
tech. dms lb 1.10 1.15
Angelica root, dom., bls lb. .80 .90
Aniline oil, dms., c.l., frt. alld lb. .22 - —
l.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .21 - —
tankwagons min 2,000 gals. lb. .21½- —
Salt, dms, c.l. truckloads, 20,000 lbs., min. frt. alld lb. .33 - —
l.c.l., same basis lb. .35 - —
Anise seed, Mexican, bgs lb. .25 - —
Spanish, bgs lb. .25 - —
Syrian, bgs lb. .25 - —
Anisic aldehyde, bots., dms lb. 1.95 - 2.70
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs lb. .15 .17
Anthracene, 90-95% bbls., ton-lots, works lb. .83 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5% bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride)
Metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½- —
Oxide, bgs., c.l., frt. alld lb. .27 - —
l.c.l., frt. alld lb. .28½- —
Sulfide, approx. 65%, bgs., dlvd lb. .23 .26
Trichloride, anhyd., solid, pails. c.l., works lb. .41 —
l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .69½- .74½
USP, powd., dms lb. .74½- .75½
Antipyrine, NF, 200-lb bbls lb 3.50 —
Apomorphine hydrochloride, USP, 25 oz. lots oz.35.60 - —
Areca nuts, powd., bbls lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz 4.50 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 - —
Arnica flowers (true Montana), bls. lb. 2.25 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., works. lb. .04½- —
l.c.l., works lb. .06½- .07¼
Asafetida, cn lb. .40 - —
powd., bbls., dms lb. .85 - —
Asbestine (see Talc, fibrous, N. Y.).
Asbestos, Canadian, crude,
6D, c.l. (30 tons), mines ton.82.00 - —
7D, c.l. (30 tons), mines ton.72.00 - —
7F, c.l. (30 tons), mines ton.68.25 - —
7H, c.l. (30 tons) mines ton.58.00 - —
7K, c.l. (30 tons), mines ton.48.30 - —
7M, c.l., (30 tons), mines ton.42.00 - —
7R, c.l. (30 tons), mines ton.41.00 - —
7RF c.l (30 tons), mines ton.42.00 - —
7T, c.l., (30 tons), mines ton.39.00 - —
7TF, c.l. (30 tons), mines ton.42.00 - —
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton.40.00 - —
seconds, 300°-390°F fusing pt., bgs., c.l., mines ton.35.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy gal. .09 - —
emulsion, tanks, tankwagon, refy. gal. .09¼- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin, (see Acid acetylsalicylic).
Atropine, USP, bots oz. 3.90 - 4.50
Sulfate, USP, bots lb. 2.10 - 2.55

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.35 1.45
Barberry root bark, bgs lb. .28 .36
Barbital, NF, 100-lb. dms lb. 4.50 - —
Sodium, NF, dms lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.104.00 - —
smaller lots, works ton.114.00 - —
Chlorate, dms., works lb. .32 - .41
Chloride, anhyd., bgs. c.l., works ton.172.00 - —
l.c.l., works ton.182.00 - —
NF, cryst., 100 lb. dm lb. .22 - —
tech., cryst., bgs., c.l., works. 100 lbs. 6.80 - —
l.c.l., works 100 lbs. 7.30 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
l.c.l., t.t.l., frt. equald ton.218.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb. .16 - —
l.c.l., t.t.l., dlvd lb. .17 - —



For improved copolymers . . . add carboxyl groups by copolymerization with methacrylic acid

Rohm & Haas methacrylic acid offers a convenient and economical means of introducing carboxyl groups by copolymerization with monomers such as styrene, acrylonitrile, butadiene, acrylates and methacrylates. The addition of carboxyl groups, often in small proportions, may provide one or more of such advantages as:

- Improved adhesion
- Emulsion stability—both mechanical and freeze-thaw resistance
- Solubility in alkalies, including ammonia
- Reactive, cross-linkable groups which permit vulcanization with such agents as zinc oxide, diamines or epoxides.

Glacial methacrylic acid is readily available from full-scale commercial production. It is one of 18 acrylic monomers now available from Rohm & Haas. For full information on acrylic monomers write to Department SP.

Chemicals for Industry

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

Barium oxide, grd., dms., c.l., t.l., frt. equald	ton	275	—
t.c.l., t.t.l. frt. equald	ton	285 00	—
Peroxide dms. frt equald	lb	20	—
Stearate, ctns., c.l., frt. alld	lb.	.41	—
t.c.l. same basis	lb.	.42	.46
Sulfate, tech. (see Barytes and blanc fixe).			
X-ray dms	lb	15	.15½
Sulfide, dms., c.l., works	ton.	95.00	—
t.c.l., works	ton.	105.00	—
Barytes, Southern, off-color, bgs., mines	ton	25 00	—
95-75% bgs. mines	ton	25 00	—
water-grd., paper bgs., c.l., St Louis	ton.	49.00	—
ex-whse. N. Y.	ton.	70.85	—
bauxite, bulk, mines	ton	6 75	10.00
Bay leaves (see Laurel leaves)			
Belladonna leaf, bls	lb	35	.37
root, bls	lb	45	50
Bentonite dom. 200 mesh, bgs. c.l. mines	ton.	14.00	—
imp Italian, white high gel, bgs 5-ton lots ex whse	ton	84.00	—
1 ton lots, ex whse	ton.	87 00	—
low gel bgs. 5-ton lots, ex whse	ton.	82.35	—
1 ton lots ex whse	ton.	85 35	—
Benzal chloride, cbys. works	lb	44	—
Benzaldehyde NF dms	lb	74	1.05
tech cbys., dms., t.l.	lb	43	—
smaller lots	lb	44	—
Benzene (see Benzol).			
Hexachloride, 25% and 99% gamma isomer (see Lindane), tech. high gamma, dms., c.l., dlvd., gamma unit-lb.		.0075	008
t.c.l. works gamma unit-lb		009	0095
low gamma, dms., c.l., dlvd., gamma unit,lb.		.0075	—
t.c.l works gamma unit-lb		009	—
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis	lb.	1.19	—
t.c.l., same basis	lb.	1.21	—
Sulfate tech frt alld., 100% basis	lb.	1.21	—
Benzocaine dm.	lb	3.48	3.50
Benzol coaltar, pure or nitration tanks works:			
Bethlehem Pa	gal	.36	—
Birmingham district	gal.	.36	—
Chicago district	gal.	36	—
Cleveland district	gal.	36	—
Geneva, Utah	gal	36	—
Johnstown Pa.	gal.	36	—
Lackawanna N Y.	gal	36	—
Lone Star, Texas	gal	36	—
Lorain, Ohio	gal	36	—
Middletown Ohio	gal	36	—
Minnequa, Colo	gal	36	—
Philadelphia district	gal.	36	—
Pittsburgh district	gal.	36	—
Sparrows Point Md	gal.	36	—
Syracuse N Y	gal.	36	—
Terre Haute Ind	gal.	36	—
Youngstown Ohio	gal	36	—
Petroleum, 2°, Houston	gal.	38	—
Benzophenone, dms	lb.	1.40	1.70
Benzotriazole tech dms. 1,000-lb lots, works	lb	2.25	—
Benzotrichloride, cbys, 1,000-lb lots or more, frt equald	lb	18	—
smaller lots frt equald	lb	20	—
Benzoyl chloride cbys dms., c.l., works, frt equald	lb.	.22	—
t.c.l., same basis	lb.	.23	—
tank trucks dlvd Metropolitan area	lb.	.21	—
Peroxide, purit tib dms. 50 to 1,000-lb lots works	lb	.98	1.08
Benzyl acetate f.t.c. ens. dms	lb	60	1.00
Alcohol (see Alcohol benzyl)			
Benzoate, NF, f.f.c., 500 lb. dms.	lb	.62	—
Chloride, tech., 13-gal cbys., dms., c.l., works, frt. equald	lb.	.23	—
t.c.l. same basis	lb.	.24	—
tank trucks dlvd Metropolitan area	lb.	.21	—

A 2½c differential is quoted on benzyl chloride in 5-gal cbys in steel dms prices were ½c lower

Cinnamate, ens	lb	3.60	3.90
Dimethylamine, dms., works	lb.	2.25	—
Formate, ens	lb.	1.80	2 10
Isoeugenol, ens.	lb	9.85	—
Propionate bots.	lb	1.35	1.65
Salicylate, bots.	lb.	1.60	1.85
Benzylidine acetone, bots	lb	1.75	1.80
Chloride (see Benzal chloride)			
Berberine bisulfate, ens	lb.	35.00	36.25
Hydrochloride bots	lb	35 00	36 25
Betaine, anhyd., 10,000-lb. lots, frt. alld	lb.	3.00	—
Hydrochloride 5,000-lb. lots, frt. alld	lb.	1.60	—
Monohydrate, 10,000-lb. lots, frt. alld	lb.	2.60	—
Betagammapicoline (see b,g-Picoline).			
Betamethylnaphthalene (see b-Methylnaphthalene)			
Betanaphthol (see b Naphthol).			
Betanaphthylamine (see b-Naphthylamine)			
Betaphenylethylamine (see b-Phenylethylamine).			
BHC (see Benzene hexachloride technical)			
Biotin cryst bots gram		10 00	—
Biphenyl (see Diphenyl).			
Bismuth chloride, jars	lb.	5.11	—
Hydroxide dms	lb	4.65	—
Metal, bxs. ton lots	lb	2.25	—
Nitrate, cryst., dms.	lb	2.10	2.17
Oxide, anhyd., dms	lb	4.47	5.05
Oxychloride, dms	lb	4.37	4 42
Phenolsulfonate, fib dms	lb	5 22	—
Subcarbonate, USP, dms.	lb	3.20	—
Subgallate, NF, fib dms.	lb.	3.15	—
Subiodide, fib. dms	lb	5.37	—
Subnitrate NF dms	lb	2.65	—
Subsalicylate, USP dms	lb	3.50	—
Bismuth-ammonium citrate, USP, nowd jars	lb	4.22	—
Bisphenol-A, c.l., t.l., frt. alld	lb	29¾	—
t.c.l., same basis	lb.	30¾	—
Black acetylene, imp. bgs., c.l., duty and freight extra	lb.	.19	—
cs., t.c.l., ex whse	lb.	.24½	.30
Ash (see Barium sulfide)			
Bone dms. t.c.l. frt alld	lb	17	23¼
Pacific coast bone t'ack prices 2c. per lb. higher			
Carbon, channel, pigment, high color beads, ctns., c.l. works	lb.	.72	—
t.c.l. dlvd or whse.	lb.	.78	—
medium color, uncompressed, bgs. c.l., works	lb.	.13	—
t.c.l. dlvd or whse.	lb.	.19	—
rubber, beads, bulk, c.l., works	lb.	07	—
bgs., c.l., works	lb.	074	—
t.c.l., works	lb	1225	—
furnace, fast extruding, bgs., c.l., works	lb.	.06	—
ctns., t.c.l., whse	lb	10	—
high abrasion, bulk, c.l. works	lb	0750	—
bgs., c.l., works	lb	0790	—
t.c.l., dlvd or whse	lb.	.122	.125
high modulus, bgs., c.l., works,	lb.	.0550	—
ctns., t.c.l. whse	lb	0950	—
semi-reinforcing bgs., c.l., works	lb	045	—
bgs., ctns., t.c.l. whse	lb	085	—
Black, charcoal (see C.).			
Dyes (see Dyes).			
Graphite (see G).			
Iron oxide, pure bgs., c.l., works	lb.	.13¼	—
t.c.l. works	lb.	.13½	—
Lamp bgs., c.l., works	lb.	.16	.45
Mineral bgs., works	lb.	.0160	.0675
Blackberry root bark bls	lb.	45	—
Black haw root bark bls	lb.	.63	.65
tree bark, bls	lb.	.45	.50
Blanc fixe, direct process, bgs., c.l., works	ton.	110.00	—
t.c.l. works	ton.	120.00	—
N. Y. whse	ton.	155.00	—
Blood dried 16-16½% ammonia, unit-ton.		5.25	—
high grade, unground, 16-17% ammonia, bgs., Chicago unit-ton.		6.00	—
soluble, bgs., c.l.	lb.	.13	.14
t.l.	lb.	.15	.17
t.t.l.	lb.	.15½	.35½
Bloodroot bls	lb	48	.50
Blue alkali dry 250-lb bbls. dlvd. N of Penn and N C. E. of Miss R including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	2.25	—
toner, litho flushed, 125-lb. bbls., same basis	lb.	1.28	—
Cobalt, genuine bbls. same basis,	lb	4.90	—
Imitation (see Blue, ultramarine)			
Dyes (see Dyes).			
Iron, reg., bbls., c.l., same basis,	lb.	.52	—
t.c.l., ton lots, same basis	lb.	.53	—
smaller lots, same basis	lb.	.54	—
Blue, iron, alkali-resisting, bbls., c.l., same basis	lb.	.57	—
t.c.l., ton lots, same basis,	lb.	.58	—
smaller lots same basis,	lb.	.59	—
Methyl violet toner molybdated, PMA, bbls., same basis	lb.	2.80	—
tungstated, PTMA, bbls., same basis	lb.	4.35	—
Peacock, fugitive, 100% color strength, bbls., same basis	lb.	.90	—
Phthalocyanine, full strength, bbls., same basis	lb	3.45	—
resinated bbls. same basis	lb	3 00	—
water dispersable bbls., same basis	lb.	1.69	—
Ultramarine, cobalt type, dry or pulp, bbls., same basis	lb.	39½	.35
jobbing types, bbls. same basis,	lb.	19	—
regular types dry bbls., same basis	lb	22½	.33
Victoria toner molybdated, PMA, bbls	lb.	4.50	—
tungstated, PTMA, bbls	lb.	5.55	—
Blue dry colors, dlvd prices ½c higher Ala. Fla., Ga., La (Shreveport 1¼c.), Miss. N. C. S. C., Tenn. Tex (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St Joseph 1.6c higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago			
Vitrol (see Copper sulfate).			
Bluestone (see Copper sulfate).			
Bonemeal, steamed, works, E	ton.	60.00	—
Los Angeles	ton.	82.50	—
Bone phosphate, defluorinated (see D) bi lime (see Calcium phosphate, tribasic), precipitated (see Calcium phosphate tribasic, NF precip.)			
Borax, tech., anhyd., 99%, bgs., c.l., works	ton.	83.00	—
ton lots ex whse, N. Y or Chi	ton.	137.23	—
smaller lots, same basis,	ton.	142.25	—
bulk, c.l., works	ton.	74.00	—
cryst., 99½%, bgs., c.l., works,	ton.	71.00	—
ton lots, ex whse, N. Y. or Chi	ton.	125.25	—
smaller lots, same basis,	ton.	130 25	—
gran., decahydrate, 99½%, bgs., c.l., works	ton.	45.00	—
ton lots, ex whse, N. Y. or Chi	ton.	99.25	—
smaller lots, same basis,	ton.	104.25	—
bulk, c.l., works	ton.	38.50	—
Pentahydrate, 99%, bgs., c.l., works	ton.	60.00	—
ton lots, ex whse, N. Y. or Chi	ton.	114.25	—
smaller lots, same basis,	ton.	119.25	—
bulk, c.l., works	ton.	53.50	—

GENERAL CHEMICAL ANNOUNCES

NEW LIQUID ALUM FACILITIES AT PORT ST. JOE, FLORIDA

General Chemical's new liquid aluminum sulfate plant at Port St. Joe, Florida, is one more example of how the Company keeps pace with alum and other basic chemical requirements of American industry year after year.

With it, General will now have 24 facilities across the country, producing dry or liquid alum. All are conveniently located in major consuming areas. Together they form a network geared to serve your alum needs—whether you operate one plant or several—anywhere on the map.

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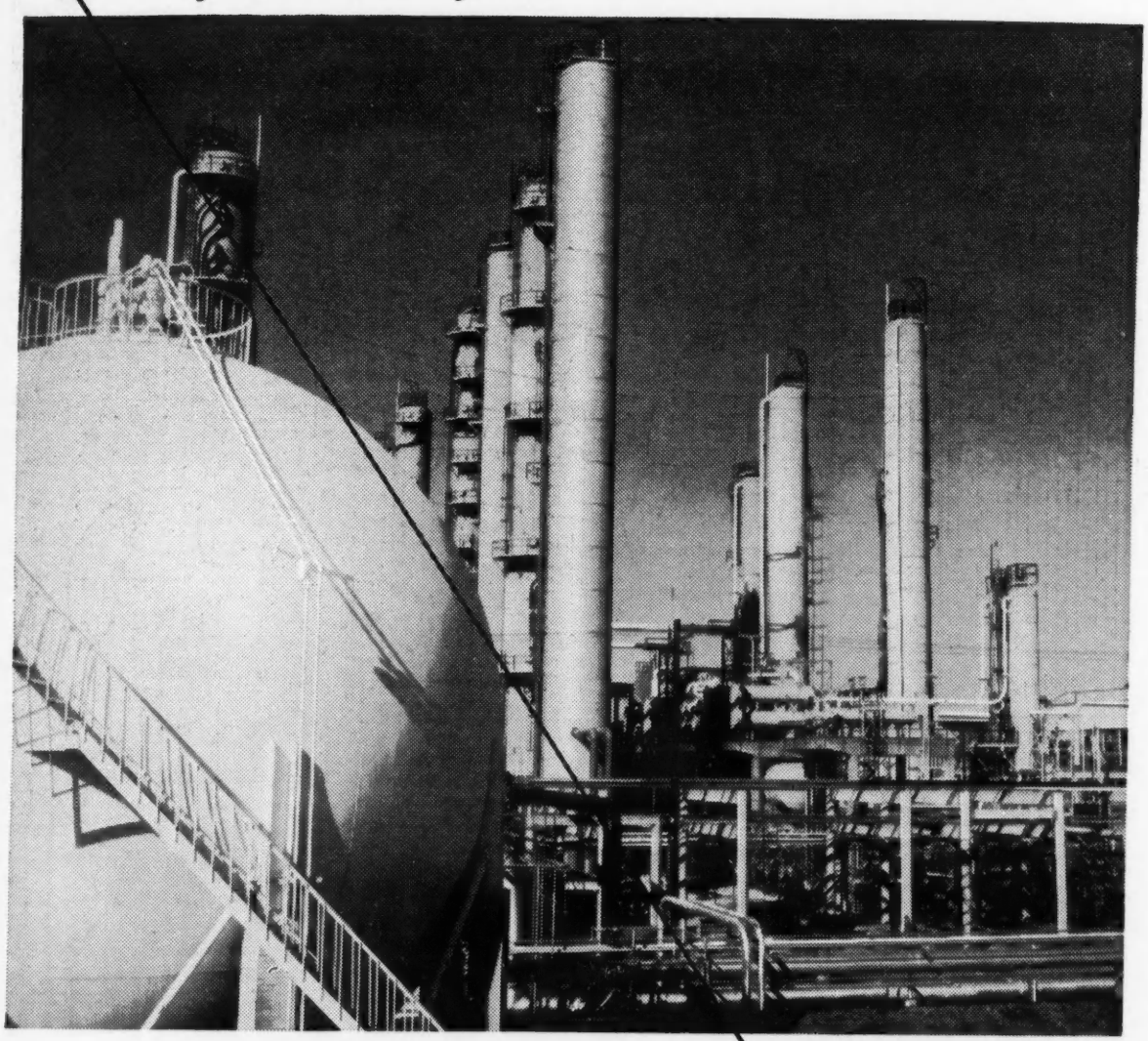
Borax—Cardamom Seed

Borax, tech., powd., bgs., c.l., works ton 50.00 - —
ton lots, ex whse. N. Y. or Chi ton 104.25 - —
smaller lots, same basis. ton 109.25 - —
USP borax $15 per ton higher
Bordeaux mixture, bgs., c.l., works, frt. alld or nearest whse pt. lb 18 .24
lb 19 .26
l.c.l. same basis lb 2.50 - 4.50
Borneol, crns
Boron trifluoride gas, cyls., truck-load, works lb 62 - —
t.t.l. works lb 70 - —
Brazilwood extract (see Hypernic extract)
Brimstone (see Sulfur).
Bromine, purif., c.s., c.l., t.l., dlvd. E. of Rockies lb .33 - —
l.c.l., same basis lb .35 - .40
ret. dms., c.l., t.l., dlvd. E. of Rockies lb .32 - —
l.c.l., same basis lb .32 - .34
tanks, same basis lb .23½ - —
Bromochloromethane dms., c.l., frt. equald lb 48 - —
l.c.l., same basis lb .50 - —
Bromoform pharmaceutical grade, bots lb 1.62 2.60
cbys. lb 1.52 —
Bromstyrol, bots lb 5.40 5.70
Bronze powder aluminum (see A).
Brown iron oxide pure bgs. c.l., works lb .14¼ - —
l.c.l., works lb .14½ - —
Brown oxide, metallic, bgs., works lb .04 - —
Sienna burnt, paper bgs., c.l., works lb .06¼ - .17¼
l.c.l., works lb .06½ .17½
raw, paper bgs., c.l., works lb .06¼ - .16¼
l.c.l., works lb .06½ .16½
Umber, burnt, American, c.l., works lb .07 - .07¾
l.c.l., works lb 07¼ - 08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb .07¾ —
raw, American bgs., works lb .07½ - .08¼
Turkey-type bgs., works lb .06¾ .07
Vandyke bbls., works lb 09½ .12
Brucine, crns., 100-oz. lots oz. .15 - .20
Sulfate, NF, crns., 100-oz lots oz. .12 - .18
Buchu leaves, bls lb 1.30 - —
Butadiene, refd. cyls. c.l. refy lb .21 - —
l.c.l. refy lb .22 - —
tanks, refy lb .15 - —
Butane, indust., tanks, group 3 gal. .05 - —
n-Butyl acetate ferment. dms. c.l. frt. alld lb .16½ - —
l.c.l., same basis lb .17½ - —
tanks, same basis lb .14 - —
syn., dms., c.l., dlvd. E lb .16½ - —
l.c.l., same basis lb .17½ - —
tanks, same basis lb .14 - —
sec-Butyl acetate syn. dms. c.l., dlvd. E lb .13½ - —
l.c.l., same basis lb .14½ - —
tanks, same basis lb .11¾ - —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works lb .37½ - —
l.c.l., works lb .38¼ - —
Ether, dms., c.l. works lb .33 - —
l.c.l., works lb .33¾ - —
tanks, works lb .31 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb .42½ - —
l.c.l. same basis lb .43½ - —
tanks, same basis lb .40 - —
Laurate, dms., works lb .37½ - —
Methacrylate dms. c.l. t.l. works. lb .55 - —
l.c.l., works lb .55½ - —
Oleate, refd., dms., l.c.l., works lb .32 - —
Phenylacetate, dms lb 4.50 4.60
Phthalate (se Dibutyl phthalate).
Stearate, dms., frt. alld. E. of Mississippi lb .26 - —
l.c.l., same basis lb .26½ - —
Butylamine (see mono- di- and tri-). lb .25 - —
6-tert-Butyl-m-cresol, dms., c.l., works lb .55 - —
l.c.l., works lb .56 - —
tanks, works lb .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs. c.l., works. lb .27½ - —
l.c.l. lb .28½ - —
Butyraldehyde, dms., c.l., dlvd lb .22 - —
l.c.l., dlvd lb .23 - —
tanks, dlvd lb 19½ —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide 25-lb. fib dms lb 6.75 7.00
Metal ingots or sticks, cs., dlvd. lb 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb 3.00 - —
hydrous, dms. 100-lib. lots or more lb 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb 3.00 - —
hydrous, 100-lb lots or more lb 2.80 - —
Citrated, USP, dms., 100-lb. lots or more lb 2.70 - —
Calamine, USP, dms lb .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram .60 - —
25 to 100 gram lots, works. gram .65 - —
in edible oil (see Viosterol)
Calcium p-aminosalicylate, fib. dms., 100 lbs or more, frt. adjusted. lb 4.00 - —
Arsenate, dealers, bgs. c.l., frt. alld lb .09 - 09½
Bromide NF, 100 lbs or more lb .92 - —
Carbide, standard generator size, dms., c.l., dlvd ton 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 - —
chalk whiting 325 mesh, bgs., c.l., works ton 32.00 -34.00
l.c.l., same basis lb .10 - .10½
water-grd. ½ to 10 microns, bgs., c.l., works ton 36.00 -
10 to 20 microns bgs. c.l., works ton 17.00 -18.00
precip dense bgs c.l works ton 32.50 —
l.c.l. works ton 42.50 —
medium bgs., c.l works ton 38 00 —
l.c.l. works ton 48 00 —
surface treated bgs., c.l., works ton 37 50 —
l.c.l. works ton 47 50 —
ultrafine, bgs., c.l., works ton 110.00 -160.00
l.c.l., works ton 120.00 -175 00
Chloride, cryst. purif. dms lb 27 —
flake 77-80%, paper bgs. c.l. works, frt equald ton 29.00 —
liquor, 40%, tanks frt. equald. ton 12.35 -
pellets bgs. c.l. works ton 35.40 -
powd., bgs., c.l., works ton 35.00 -
solid, 73-75%, dms., c.l., frt. equald ton 27.50 - —
l.c.l., works frt equald. ton 34.00 -71.00
USP gran. dms lb .32 —
Chromate, bgs., frt. equald lb .29½ - .30
Cyanide, dms. c.l., dlvd. E. of Rockies lb .20 —
l.c.l. same basis lb .24 - .55
Cyclamate, 100-lb. fib. dms lb 2.95 - —
Gluconate, AA, bbls., dms lb .74 - .76
USP bbls., dms lb .67 .69
Hydride, dms., works lb 2.15 3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs 22.95 -25.10
100-lb. dms., same basis dm 30.80 -34.50
Hypophosphite, dms., 1,000-lb. lots. lb 1.28 - —
Iodide, jars lb 4.52 —
Lactate NF, dms., 10,000-lb. lots or more works lb .38 .40
Mandelate, USP dms. works lb 2.10 2.25
smaller lots, works lb .41 - .48
Naphthenate liq., 4% Ca., dms., frt equald lb .27¼ - —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton 46.00 - —
tech., 5-dm. lots, works lb .13 - —
Pantothenate, dms., bots., frt. adjusted gram .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate, dms lb .74 - —
Phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
l.c.l. frt. equald 100 lbs. 8.50 - —
feed grade, 18½%P bgs., c.l., t.l., frt. equald ton 79.55 -83.25
l.c.l., frt equald ton 89.55 -93 25
21% P, bgs., c.l., t.l., frt. equald. ton 94.50 - —
l.c.l., frt equald ton 99 50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.20 - —
smaller lots same basis. 100 lbs. 7.70 - —
tribasic, NF precip. bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
l.c.l., frt. equald 100 lbs. 10.50 - —
Phylate, bgs., works lb .50 - —
Resinate, precip. dms. frt. alld., works lb .30½ - —
Silicate, hydrated, bgs. c.l., works. lb .06 - —
l.c.l., works lb .06½ - —
paint grade (see Wollastonite)
Stearate, ctns., c.l. lb .39 - —
l.c.l. lb .40 - .44
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb 5.42 - —
Camphene 46 m.p. dms. incl., c.l., works lb .15 —
l.c.l. same basis lb .16½ - —
tanks, same basis lb 12½ - —
Chlorinated, 67-69% (see Toxaphene)
Camphor monobromated NF dms. kgs lb 3.50 - —
nat. USP powd. cs. 100-lb lots. lb .60 .65
tablets, 1-oz., ½-oz cs lb .85 .90
syn., tech., 1 bbls or more lb .48 - —
USP, gran. powd. bbls., 2,000-lb lots lb .59 —
1,000-lb lots lb .60 - —
smaller lots lb .61 - —
tablets, tins, 2,000-lb lots lb .90 - —
1,000-lb. lots lb .91 - —
smaller lots lb .92 - —
Canada balsam (see Fir balsam)
Cantharides, Chinese, cs lb 2.00 2.05
powd., bxs lb 2.25 2.30
Russian, bgs lb 4.00 4.05
powd., bxs lb 4.35 4.40
Capsicum (see Pepper red).
Oleoresin, NF from domestic pepper, dms lb 4.50 5.25
from African pepper, dms lb 4.35 5.00
Caraway seed, Dutch, bgs lb. .17 - —
Carbazole 97% bbls. ton lots, works lb 1.05 —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd. Metrolopitan area ton 73.00 -115.00
cyls., same basis lb .08 .09
solid, same basis lb .035 .040
Disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb .07 - —
l.c.l. same basis lb .08½ - .09
5-gal dms., 30 dms to c.l., same basis lb .13 - —
less than 30 dms lb .16 - —
tanks, dlvd. lb .0545 —
Tetrachloride, CP, consumers, dms., l.c.l., frt. alld lb .12¼ - .14¼
tech. consumers dms. c.l., frt. alld lb .11¼ - —
l.c.l. frt. alld lb .13½ - —
tanks, frt. alld lb .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal NF, dms. 100-lb lots, works lb 4.00 4 25
smaller lots, works lb 4.10 4 75
Cardamom seed, bleached "A" lb 3.20 —
"B" lb 3.10 - —
decorticated, Ceylon, cs lb 3.00 - —
Guatemalan, cs lb 3.00 - —
green, Alleppey, bgs lb 2.15 - —
Ceylon, bgs lb 2.15 - —

more for today... and tomorrow



Petro-Tex is a "growth company" in every sense of the words... additional capacity, expanding product lines and aggressive application research.

While providing substantially greater butadiene output for present and prospective users, we also will soon have pure isomers of n-butylene 1 and n-butylene 2 at attractive prices for new markets and products. Other butane-derived products and applications are being investigated.

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TENNESSEE GAS TRANSMISSION COMPANY AND FOOD MACHINERY AND CHEMICAL CORPORATION

Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd	lb.	16.80	—
smaller lots, dlvd	lb.	16.90	-17.30
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd	gram.	.295	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units.		.12	—
microcrystalline in oil, 400,000 A units per gram, dms., dlvd. million units.		.21	—
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram, cns	gram.	.35	—
in vegetable oil, 400,000 A units per gram, cns	gram.	.084	—
Carvol, bots	lb.	4.50	- 8.00
Cascara sagrada bark, bulk	lb.	.36	—
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point	lb.	No prices.	
premium, bgs., 10,000-lb. lots or more, shipt. point	lb.	No Prices	
imp., acid-precip., grd., Argentine, bgs., c.l., duty paid	lb.	.23¼-	.23¾
New Zealand, duty paid	lb.	.25 -	.26
Cashewnut shell liquid, treated, dms. c.l., Newark, N. J	lb	22	—
ton lots, same basis	lb	21	—
dm. lots same oasis	lb	25	—
Cassia, Batavia, "A," bls.	lb.	.22	—
"B"	lb.	.21	—
"C"	lb.	.20	—
Corinje, "A"	lb.	.20½-	—
"B"	lb.	.19½-	—
"C"	lb.	.18 -	—
Castor beans, bgs., f.o.b. Brazil	ton.	185.00	Nom.
Oil (see Oil, castor)			
Pomace, bgs., c.l., works	ton.	45.50	—
Castoreum, nat., cns	lb.	5.25	-30.00
syn., cns	lb	9.00	—
Catechol, CP, cryst., fib dms., works	lb	2.17½-	—
resub., dms., works	lb	4.29½-	—
Catnip leaves, Southern, bls	lb	75	—
Celery seed, French, bgs	lb.	.41	—
Indian, bgs.	lb.	.21	—
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E	lb.	.35	.46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	.555
27% butyryl content, bgs., dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb	545	.555
50% butyryl content, bgs., dlvd. E	lb.	.585	.595
half-second, bgs. dlvd E.	lb	545	.555
Scrap (see Pyroxylin scrap)			
Cerium chloride, 48% dms., dlvd.	lb.	.30	—
Hydrate 74% CeO_2, fib dms., 100-lb lots or more	lb	1.44	—
77% CeO_2, fib dms., 100-lb. lots or more	lb	1 74	—
Oxalate, NF, 48% bgs., works	lb.	1.00	—
Oxide, optical grade, bgs., 50-lb lots or more, dlvd	lb	1 85	1.98
smaller lots, dlvd	lb.	2.03	- 2.23
Chalk (see Calcium carbonate)			
Chamomile flowers, Hungarian style, cs	lb.	.85	- .95
Roman, cs.	lb.	2.30	- 2.75
Charcoal, activated, NF, fib. dms., c.l., works	lb	25	.32
5-ton lots, works	lb	26½-	.32½
smaller lots works	lb	27	.30
Bone (see Black, bone)			
Hardwood, bulk, lump, c.l., f.o.b. plant	ton.	55.00	—
briquets, bulk, c.l., f.o.b. plant	ton.	75.00	-80.00
5 lb. paper bags, c.l., same basis	ton.	108.00	—
10 lb. paper bags, c.l., same basis	ton.	95.00	-98.00
25 lb. paper bags, c.l. same basis	ton.	82.00	-88.00
40 lb. paper bags., c.l., same basis	ton.	81.00	-85.00
Pinewood, gran., bgs., c.l., works, South	ton.	57.00	—
l.c.l., works, South	ton.	57.00	-67.00
lump, bgs., c.l., works, South	ton.	53.50	—
l.c.l., works, South	ton.	56.50	-71.00
bulk, c.l., works, South	ton.	38.00	—
t.l., works, South	ton.	41.00	—
Chestnut extract, solid, 60% tannin, bgs., exdock, plus duty	lb.	.0933-	—
powd., 70% tannin, bgs., exdock, plus duty	lb.	.1085-	—
Chloral tech. 94% min. dms., c.l., works	lb	23	—
l.c.l., works	lb.	24	—
tanks, multiple units, 5 cars, works	lb.	.21	—
Hydrate, USP, 1,000-lb. lots	lb.	.83	—
500-lb. lots	lb.	.88	—
100-lb lots or less	lb.	.93	—
Chloramine T, NF, bbls, works	lb	75	1.00
Chlordan, agricultural dms. c.l., frt. alld	lb	65	—
l.c.l. 5,000 to 10,000-lb. lots, frt. alld	lb.	66	—
clarif., dms., c.l., frt. alld	lb	69	—
l.c.l. 5,000 to 10,000-lb. lots, frt alld	lb	70	—
Chlorinated paraffin, 42%, dms., c.l., frt alld	lb.	16¼	—
l.c.l. same basis	lb.	17¼	—
70%, dms., c.l., same basis	lb.	18¾	—
l.c.l. same basis	lb.	19¾	—
Rubber, 5, 10, 20 cps, ctns., c.l., works	lb.	.60	—
l.c.l., works	lb.	.61	—
125, 1,000 cps., ctns., c.l., works	lb.	.70	—
l.c.l., works	lb.	.71	—
Chlorine, liq., cyls., c.l., works, frt equald	lb	10¼	—
l.c.l. Metropolitan area	lb	11¾	.13
tanks, single units, works, frt. equald	100 lbs	3.15	—
multiple units, 5 cars, works, frt equald	100 lbs	4.05	—
3 cars, same basis	100 lbs	4.25	—
2 cars, same basis	100 lbs	5.25	—
1 car, same basis	100 lbs	7.25	—
4-Chloro-2-aminotoluene fused bbls	lb	1.45	—
m-Chloroaniline, dms. min. 10,000 lbs or over, frt alld	lb	75	—
less than 10,000 lbs., same basis	lb.	80	—
tanks, same basis	lb.	73	—
o-Chloroaniline, dms. c.l., frt. alld.	lb	65	—
l.c.l., same basis	lb.	67	—
tanks, same basis	lb.	63	—
p-Chloroaniline, dms. c.l. frt. alld.	lb	77	—
l.c.l. same basis	lb	79	—
o-Chlorobenzaldehyde, dms., t.l., works	lb	1.05	—
l.t.l., works	lb	1.20	—
p-Chlorobenzaldehyde, dms., c.l. works	lb	1.95	—
Chloroform, tech, dms. c.l. dlvd E	lb	18	—
l.c.l., same basis	lb	19	—
tanks, same basis	lb	17	—
USP, dms	lb	30	—
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis	lb.	.81	—
powd., dlvd. E., 100% basis	lb.	86	—
4-Chloro-2-nitroaniline, powd. dlvd. E	lb.	.80	—
o-Chlorophenol, dms. c.l. frt. equald	lb.	.37	—
l.c.l., same basis	lb.	.38	—
p-Chlorophenol, dms., c.l., frt. equald	lb.	.37	—
l.c.l., same basis	lb	.38	—
Chloropicrin, comi. bots	lb	1.50	—
cyls., 180 lbs., frt. alld	lb.	.95	—
100 lbs. same basis	lb.	.97	—
25 lbs., same basis	lb.	1.22	—
Choline bitartrate, fib dms., frt. adjusted	lb	1.25	1.35
Chloride, fib. dms. frt. adjusted.	lb	1.25	1.35
Dihydrogen citrate, fib. dms., frt. adjusted	lb	1.25	1.35
Chromium acetate soln. 7½%, bbls., works	lb	.09½-	—
cbys. works	lb	.11¼-	—
Fluoride, bbls., works	lb	.51	.52
Green (see Green, chrome).			
Oxide (see Green chromium oxide)			
Trioxide, NF, bots	lb.	1.15	—
Yellow (see Yellow chrome).			
Cinchona bark, NF, red, broken, bgs	lb.	.35	.40
yellow, broken, bgs	lb.	.35	- .40
Cinnamic aldehyde, dms	lb.	.95	- 1.25
Cinnamon, Ceylon, No. 2, bgs	lb.	.98	—
"0000," bgs., afloat	lb.	1.08	—
Citral, bots., cns	lb.	4.90	5.90
Citronellal, bots, dms.	lb	2.85	3.50
Citronellol, bots., dms.	lb.	4.30	- 4.60
Civet, artif, bots	lb.	13.75	-15.00
nat., bots	oz.	6.50	-15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.	19.50	—
crushed, shed moisture, bulk, c.l., Tenn	ton.	10.00	—
purif., bgs., c.l., Tenn	ton.	20 50	—
imp., airfloated, bgs., c.l., Atl. port	long-ton.	42.00	-45.00
lump, bulk, Atl. port	long-ton.	27.00	-30.20
China, dom., dry-grd. airfloat, 99% 325 mesh, bgs., c.l., Georgia works	ton.	10.00	—
l.c.l., Georgia works	ton.	15.50	—
300 mesh., bgs., c.l., Georgia, works	ton.	13.50	-14.50
l.c.l., same basis	ton.	35.00	-36.00
imp. white, lump, bulk, c.l., ex-dock, Phila., Portland, Me.	gross ton.	20.00	-35.00
powd. bgs., c.l. ex dock	net ton.	50.00	—
l.c.l., ex whse	net ton.	60.00	-65.00
Clove, Madagascar, bgs	lb.	.42½-	—
Zanzibar, bgs	lb.	.47 -	—
CMC, crude, 96%, low or medium, vis., bgs., or fib dms., 23,000 lbs., dlvd E., 100% basis	lb.	.39½-	.41
less than 23,000 lbs., dlvd E., 100% basis	lb.	.41½-	.43
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis	lb.	.39½-	.41
l.c.l. dlvd E. 100% basis	lb.	.41½-	.43
purif., high vis (see Gum Cellulose).			
CMC, standard, low or medium vis., bgs. 23,000 lbs. or over, works, frt alld	lb	55	—
smaller lots, same basis	lb	57	—
CMC prices W of the Rockies are 2c per lb. lower and are on a works basis			
Coaltar crude, resale for solns. dms. c.l. ex-whse	gal.	30½	—
l.c.l., ex-whse	gal.	.33½-	—
tanks, ex works	gal.	.17 -	—
refd., resale, industrial, dms., c.l., ex-whse	gal.	.30½	.35
l.c.l., ex-whse	gal.	.33½-	.39
tanks, works	gal.	.16½-	.20½
Cobalt acetate, 23.7% dms., dlvd.	lb	1.20	—
Carbonate, 46% powd. bgs., dlvd.	lb.	1 85	—
Chloride, 24.2% Co. dms., dlvd.	lb	1.20	—
Hydrate, 60-61% Co. dms. dlvd	lb	2.62	—
Linoleate, fused, 8½% Co., dms.	lb.	75¾	—
liq., 6% Co. dms	lb	61	—
Metal, 97-99%, kgs., ex whse	lb.	2.00	- —
Naphthenate, liq., 6% Co., dms., dlvd	lb.	48¼	—
Nitrate, 20.1% Co., bbls., dlvd.	lb.	1.00	—
Oxide, black, 72½-73½% Co., kgs	lb.	1.52	- —
70-71% Co, kgs	lb.	1.48	- —
Phosphate, powd., 32.1% Co., kgs., dlvd	lb	1.69	—

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OVER TWENTY YEARS EXPERIENCE IN RESEARCH and production of bromine, magnesia, chloride and calcium chemicals, and recent expansions in capacities and improvements in processes provide facilities for customers requiring basic supplies of industrial, pharmaceutical, agricultural, and rare earths chemicals. Inquire about our program of cooperative research on your problems.

Aluminum Bromide Anhydrous. Technical grade, dark colored product suitable for most manufacturing uses. Highly reactive catalyst, many uses in organic synthesis especially in isomerization, bromination and halogen exchange reactions. Available as solid or lump.

Ammonium Bromide N.F. X. A white powder, very pure, complies with all the requirements of the National Formulary. Commonly used as sedative in pharmaceutical preparations. Also in photography, textile finishing and as fire retardant for fabrics.

Bromine, Dry. A powerful oxidizing and brominating agent used in manufacture of dyes, pharmaceuticals. Many applications in organic synthesis. Low moisture content of 30 ppm permits use in nickel and monel equipment. Very irritating to skin, eyes.

Chlorobromomethane "CB". A specially prepared pure, noncorrosive fire extinguishing fluid. Now finding increased use in factories, warehouses, homes. Clear, colorless, 2 degrees C. boiling range; complies with current military specifications. Used as solvent and in organic synthesis.

Cyclopentyl Bromide. A clear, colorless liquid with an aromatic odor. Specially prepared for use in organic synthesis, particularly for introduction of the cyclopentyl radical. Many potential uses in manufacture of pharmaceuticals. Purified grade, 2 degrees C. boiling range.

1, 3-Dibromo-5, 5-dimethylhydantoin. $C_5H_6Br_2O_2N_2$. A bromine carrier and oxidizing agent. Useful in synthesis for side chain bromination and bromination of allylic carbon atoms. A fine stable powder with a minimum active bromine content of 54%.

β - Diethylaminoethyl Chloride Hydrochloride. $(CH_3CH_2)_2NCH_2CH_2Cl \cdot HCl$ (DEC). A granular solid. Specially suited for use as an intermediate in organic chemical manufacture, including antispasmodic agents and other pharmaceuticals.

β - Dimethylaminoethyl Chloride Hydrochloride. (DMC). $(CH_3)_2NCH_2CH_2Cl \cdot HCl$. A granular solid. Specially prepared for use in manufacture of antihistaminics and other pharmaceuticals. Other potential uses in organic synthesis. Relatively nontoxic in hydrochloride form.

β - Dimethylaminoisopropyl Chloride Hydrochloride. $(CH_3)_2NCH_2CHClCH_3 \cdot HCl$. (DMIC). An organic intermediate similar in appearance and properties to DEC and DMC. Specially prepared for manufacture of analgesics and other pharmaceuticals. Other potential uses in organic synthesis.

γ - Diethylaminopropyl Chloride Hydrochloride. $(C_2H_5)_2 NCH_2CH_2CH_3 \cdot HCl$ (DEPC). A light tan to white crystalline hygroscopic solid. Used in pharmaceutical manufacture, especially for introduction of the diethylaminopropyl radical.

γ - Dimethylaminopropyl Chloride Hydrochloride. $(CH_3)_2 NCH_2CH_2CH_2Cl \cdot HCl$ (DMPC). A white powder of singular purity. A versatile intermediate for pharmaceutical and organic syntheses, available exclusively from Michigan Chemical.

Ethyl Bromide. A clear, colorless, volatile liquid, specially prepared for use as an intermediate in organic synthesis. Practically free from impurities; has a narrow boiling range. Used in manufacture of dyes, perfumes and pharmaceuticals.

Hydrobromic Acid. A clear, colorless or light amber colored fuming liquid. Used for manufacture of inorganic metal bromides, aliphatic bromides, pharmaceuticals, dyes and intermediates. 48% acid and other strengths.

Magnesium Carbonate, Basic, Technical. Fine, uniform white powder, 325 mesh, bulk density 5.5 pounds per cubic foot. Very reactive. Used for rubber compounding, printing inks, paints, varnishes. Anticaking agent for table salt; conditioning or bulking material for powder formulations.

Magnesium Hydroxide. Fine, white powder, typical assay 96.3%, low in moisture, iron, alumina, silica. Technical and NF X grades. Special bulk densities available in NF grade. Convenient material for manufacture of light magnesias, other magnesium compounds.

Magnesium Oxides. Six principal grades of Michigan magnesium oxide with wide range of desirable physical and chemical characteristics covering principal uses of MgO, including rubber compounding, rayon manufacture, ceramics, glass, refractories, insulation.

Methyl Bromide. A heavy, colorless liquid, vaporizing at 40 degrees F., nonflammable and poisonous. Highly penetrating and insecticidally effective fumigant. Also used in organic synthesis for the introduction of the methyl group, especially in preparation of certain pharmaceutical chemicals.

Monobromobenzene. Clear, colorless, heavy liquid. Specially prepared for use as an intermediate in preparation of organic compounds. For introduction of the phenyl radical and in Grignard-type reactions. A pure material with a 2 degrees C. boiling range; specific gravity 1.495.

Phosphorous Tribromide. Brominating agent. A liquid, boiling point 173 degrees C., which fumes in contact with moist air. Used in synthetic work to convert alcohols to bromides, and acids to acyl bromides. Specially useful in preparation of bromides from alcohols without rearrangement.

Potassium Bromate, Granular. A fine, white, granular or crystalline material 99.5% pure. Decomposes at 370 degrees C. with evolution of oxygen. Strong oxidizing agent, used as an analytical reagent. Neutralizer in permanent wave compounds.

Potassium Bromate, Powder. A fine uniform powder with same properties as Granular. Available with added magnesium carbonate conditioning agent when specified. Suitable for use as an aging additive for flour.

Potassium Bromide, N.F. X. Pure, white granular powder. Low in chloride, passes all N.F. requirements. Widely used in the preparation of photographic emulsions, and in lithograhy. One of the most important sedatives. Available in several granulations.

Sodium Bromide, U.S.P. XV. Pure, white crystaline powder or granules. Passes all requirements of the U.S. Pharmacopoeia. High assay; low in chloride. An important nerve sedative. Used in manufacture of other bromides. Contains about 77.5% bromine.

Tetrabromophthalic Anhydride. $C_8Br_4O_3$. High molecular weight phthalic anhydride having a bromine content of 66%. Will undergo most of the reactions of phthalic anhydride. Pale yellow crystalline compound melting point minimum 265°C.

Trimethylene Chlorobromide. Clear, colorless liquid used in manufacture of anesthetic grade cyclopropane. Greater reactivity of bromine atom makes trimethylene chlorobromide specially useful also in preparation of gamma chloro compounds. Boiling range 2 degrees C. maximum.

Zinc Bromide Solution, Optical Grade. Clear, colorless solution, about 80% $ZnBr_2$. Used in laboratories dealing with radioactive chemicals as a radiation viewing shield; the most satisfactory material. Meets all chemical and optical specifications of Argonne National Laboratory.

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Cobalt resinate, fused, 3% Co., dms., lb. .29¾ - —
Sulfate cryst., 21% Co., dms., dlvd lb. .79 - —
monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate 6% Co., dms., dlvd lb. .43¾ - —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocilana bark, bls. lb. .25 - —
Cocoa butter, bgs. lb. .66 - .70
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Phosphate USP cns., 100-oz. lots oz. 10.25 - —
Sulfate USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb .20 - .22
blue, bls lb .20 - .22
Colchicine, USP, bots., cns. oz. 29.00 - 35.50
Colchicum root, bls lb. .35 - —
seed, bgs lb. .60 - —
Collodion, USP, dms. lb. .32½ - —
flexible, dms lb. .34 - —
Colocynth pulp, bls. lb. .55 - —
Colombo root, bls lb. .15 - .16
Condurango bark, bales lb. .26 - —
Copaiba balsam, cns., dms lb. .85 - —
Copper acetate, bbls. c.l. works lb .53 - —
l.c.l., works lb .54 - —
Carbonate, 55%, bgs., c.l., works, lb. .34¾ - —
l.c.l., works lb. .36¾ - —
Chloride, cupric, anhyd., dms., works lb. .44¼ - .44¾
cryst., dihydrate, dms., works, lb. .30 - .30½
dried, dms., works lb. .38¼ - .38¾
cuprous, dms., works lb. .44 - .47½
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .74½ - —
1,000-lb. lots or more lb. .75½ - —
smaller lots lb. .77½ - —
Gluconate dms lb 3.15 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss lb. .52½ - —
l.c.l., same basis lb. .53 - —
Metal, electrolytic, dlvd. Valley basis lb. .34 - —
Naphthenate, liq. 8% Cu. dms., frt. alld lb. .24½ - —
Nitrate, tech., cryst., dms., works, lb. .33¼ - —
Oleate, solid, 9% Cu, dms., works, lb. .45 - —
Oxide, black, bbls., 100-1,999-lb. lots, works lb. .51½ - —
red, 97% USN Type I, bbls., 100-5,000-lb. lots lb. .62½ - —
90% USN Type II, bbls., 100-5,000 lots or more works. lb. .60½ - —
Oxychloride, dms. c.l. works lb. .53 - —
l.c.l., works lb. .53½ - .63½
Quinolinolate, fib. dms lb 4.25 4.50
Resinate, precip., dms., frt. alld. lb. .31½ - —
Sulfate, CP, gran., dms., works. lb. .2030 - —
cryst., 99%, bgs., c.l., works, 100 lbs. 13.40 - —
l.c.l., same basis 100 lbs. 13.90 - 17.40
monohydrated, 35%, dms., c.l., works 100 lbs. 23.00 - —
l.c.l., works 100 lbs. 23.75 - —
tribasic, dealers, bgs., c.l., same basis 100 lbs. 29.00 - —
l.c.l., same basis 100 lbs. 30.00 - 34.00
Undecylenate, dms. lb. 2.00 - 3.00
Copra Atlantic Gulf ports, c.i.f. ton. 151.00 - —
Pacific ports, c.i.f. lb. 152.50 - —
Coriander seed, Moroccan, bgs lb .12 - —
Roumanian, bgs lb. 09 - .09½
Yugoslavian bgs lb. 08½ - —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.57 - —
Syrup, 42° non-ret. dms. c.l. 100 lbs. 7.30 - —
l.c.l. 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton. 56.00 - 56.50
Cramp bark, NF bls lb .85 - .90
Coumarin, NF, cryst. dms lb 3.60 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots, chys, lb 3.05 - 3.26
Coaltar crude tanks, works, frt. adjusted gal. .24 - —
soln., 80%, tanks, works gal. .226 - —
retd., dms., c.l., works gal. .42 - .44
l.c.l., same basis gal. .53 - .55
tanks, same basis gal. .33 - .35
Wood, beachwood, chys., dms lb 1.60 - 1.65
hardwood NF bots, chys lb 1.30 - 1.35
pinewood, dms., c.l., incl. lb. .0561 - —
l.c.l., incl. lb. .0634 - —
N. Y. whse lb. .0745 - —
tanks, works lb. .0460 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non ret. dms., c.l., frt equald lb. .1625 - —
l.c.l., same basis lb. .1675 - —
tanks same basis lb .145 - —
USP, non-ret. dms., c.l., same basis lb. .1775 - —
l.c.l., same basis lb. .1825 - —
tanks same basis lb .160 - —
m-Cresol, 95-98% dms. c.l. works, lb .60 - —
l.c.l. works lb .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .1775 - —
l.c.l. same basis lb. .1825 - —
tanks, same basis lb .160 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .2175 - —
l.c.l. same basis lb. .2225 - —
tanks, same basis lb .200 - —
o-Cresol, m.p. 30.5° C. and over, ret. dms., c.l., frt. equald lb. .16¾ - —
l.c.l., same basis lb. .17¼ - —
tanks, same basis lb. .15 - —
30°-30.49° C., ret. dms., c.l., frt. equald lb. .16¼ - —
l.c.l., same basis lb. .16¾ - —
tanks, same basis lb. .14½ - —
29°-29.9° C., ret. dms., c.l., frt. equald lb. .15¾ - —
l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .14 - —
o-Cresol, m.p., 25°-28.9°C., dms., c.l., frt. equald lb. .14¾ - —
l.c.l., same basis lb. .15¼ - —
tanks, same basis lb. .13 - —
p-Cresol, 98% dms. c.l. dlvd lb 50 - —
l.c.l., dlvd lb 51 - —
tanks dlvd lb 49 - —
Methyl ether, cns lb 1.80 - 2.05
Crotonaldehyde, 91-93% dms., t.c.l., works lb. 24¼ - .25
Cryolite, nat., tndust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. .70 - —
powd., cs. lb. .85 - —

Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb .11 - —
l.c.l., works lb. .30 - —
Cumin seed, Iranian, bgs lb. .18½ - —
Moroccan, bgs lb. .22 - .23
Turkish, bgs. lb. N.P. —
Cutch extract, 55% tannin, bgs. ex dock, duty extra lb. 08½ - —
Cyanamide fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works unit-ton 2.75 - —
Indust. grade, bgs., c.l., works ton. 75.00 - —
l.c.l., works ton. 96.00 - —
8-16 mesh, dms. c.l., works ton 120.00 - —
l.c.l., works ton. 140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. 70 - —
l.c.l., works gal 72 - —
tanks, works gal 55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28 - —
l.c.l., works, same basis lb. .29 - —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb .32½ - —
l.c.l., works lb. .35 - —
tanks, works lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5°C-85°C, 360-lb dms., c.l., works lb. .55 - —
l.c.l., same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works, lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane CP, 2-lb. cyls., works cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

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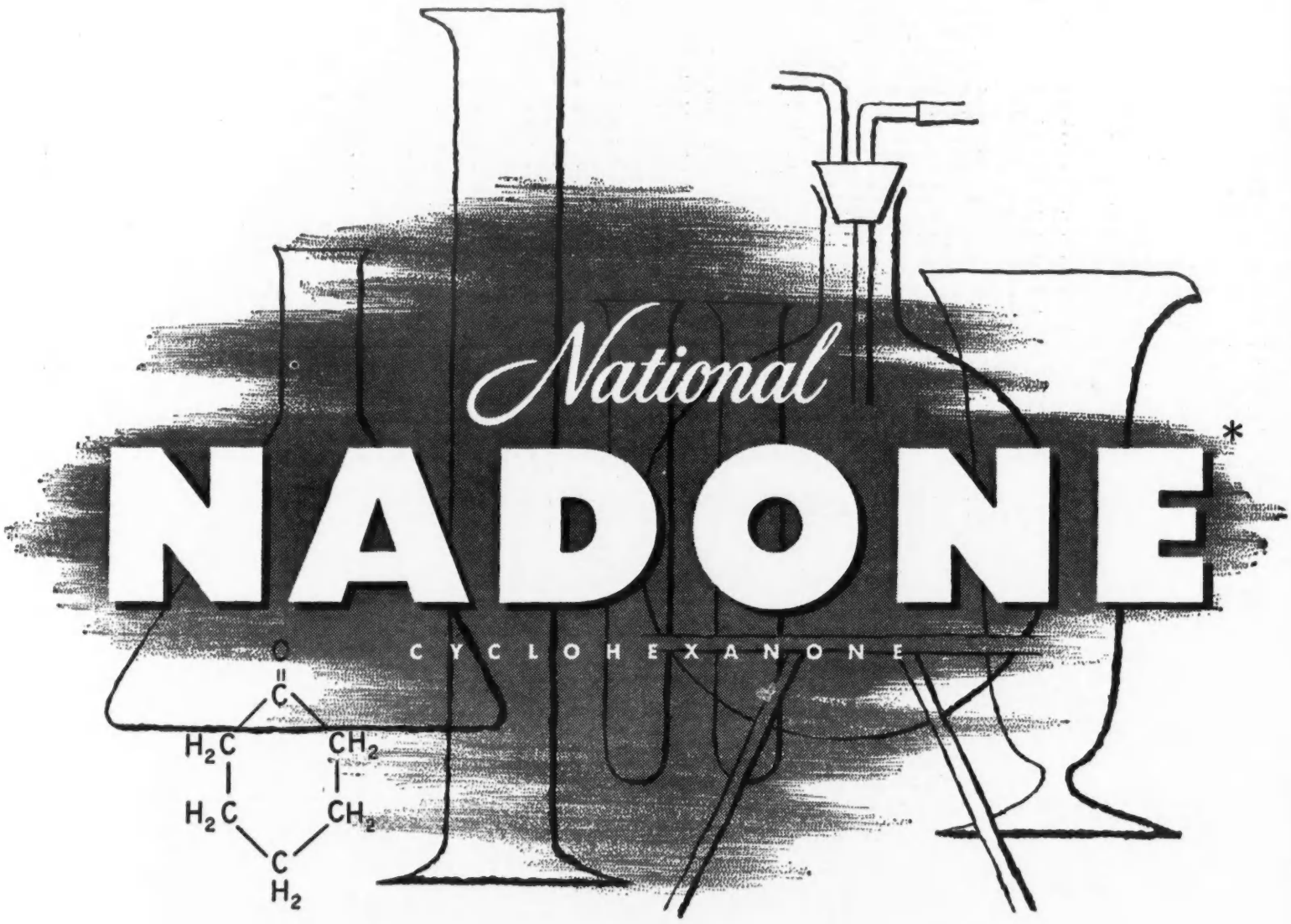
2-4-D, tech., dms., c.l., works, frt. equald lb .37 - —
l.c.l., same basis lb .42 - .46
Butyl ester, dms., c.l., works, lb. .40 - —
l.c.l., same basis lb. .45 - .49
tanks, same basis lb. .39 - —
Isopropyl ester, dms., c.l., works lb. .40 - —
l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —
Dandelion root, bls lb. .32 - —
DDD, tech., flake, grd. fib. dms., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb 23 - .27
smaller lots, same basis lb. 24 - .28
fib. dms., c.l., same basis lb 24 - 28
smaller lots, same basis lb 25 - .29
1-Decanol, tech., dms., c.l., dlvd lb 41 - —
l.c.l. dlvd. lb. 43 - —
tanks, dlvd. lb 38½ - —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton 49.50 - —
17%P paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l., t.l., works ton. 64.10 - —

Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices.

Degras, common, bbls lb. .10 - .12
neutral, bbls lb. .21 - .23
d-Desoxyephedrine hydrochloride, bots lb. 24.00 - 25.00
dl, bots lb 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.33 - —
l.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.17 - —
l.c.l. 100 lbs. 9.32 - —
light paper bgs., c.l. 100 lbs. 9.07 - —
l.c.l. 100 lbs. 9.22 - —
white paper bgs., c.l. 100 lbs. 8.91 - —
l.c.l. 100 lbs. 9.06 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Potato, imported bgs lb. .10½ - .11
Dextrose, USP, dms lb. .17¾ - —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.25 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Di-tert-amyl phenol, dms., l.c., works lb. .32 - —
l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
o-Dianisidine fib. dms lb 2.00 - —
Dibenzyl sebacate, dms., c.l., works, lb. .89¾ - .90
l.c.l., same basis lb. .90¼ - .91
tanks, same basis lb. .88 - —
p-Dibromobenzene bgs., 500-lb lots, lb. .55 - —
Dibutyl fumarate, dms., c.l., t.l., frt. alld lb. .33 - —
l.c.l., t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½ - —
Dibutyl maleate, dms., c.l., t.l., frt. alld lb. .33 - —
l.c.l., t.l., dms., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½ - —
Dibutyl phthalate, dms. c.l. dlvd. E lb. .32½ - —
l.c.l., same basis lb. .33½ - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½ - .67
tanks, works, dlvd lb. .64 - .64½
Tartrate dms. works, frt alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55½ - —
l.c.l., same basis lb. .56½ - —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
l.t.l., dlvd lb. 1.24 - —
tech., dms., c.l. lb. .91 - —
l.c.l. lb. .95 - —
tanks lb. .86 - —
Dicapryl phthalate, dms. c.l. dlvd., lb. .31 - .32
l.c.l., dlvd lb. .32 - .33
tanks, dlvd lb. .27½ - —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms. c.l., frt. alld. E lb. .12¼ - —
l.c.l., same basis lb. .13¼ - —
tanks, same basis lb. .10¾ - —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms. c.l. or t.l., works lb. .33½ - —
l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).

Dichloropentanes, dist., dms., c.l., works lb. .03 - —
l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works, lb. .54 - —
l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼ - .59
l.c.l. same basis lb. .59¼ - .60
Didecyl phthalate, dms., c.l., works, lb. .34 - —
l.c.l. same basis lb. .35 - —
tanks same basis lb. .31½ - —
Dieldrin, dms., frt. alld lb 1.80 - —
l.c.l. frt alld lb 1.85 - —
Diethanolamine, dms. c.l., dlvd E. lb. .27 - —
l.c.l. same basis lb. .28 - —
tanks, same basis lb. .24½ - —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l. same basis lb .48 - —
tanks same basis lb .45 - —
Ethanolamines, dms. c.l. dlvd. lb. .69½ - —
l.c.l. dlvd lb. .70½ - —
tanks dlvd lb .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l same basis lb. .43 - .45
tanks same basis lb .40 - —
Phthalate, dms., c.l., dlvd lb. .30 - .30½
l.c.l., dlvd. lb. .31 - .31½
tanks, dlvd. lb. .27½ - .28
Sulfate, dms., c.l., works lb. .19 - —
l.c.l. works lb. .19¾ - —
tanks, works lb. .17 - —
Diethylamine, dms., c.l. dlvd. E lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48½ - —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms. c.l. dlvd E. lb. .17¾ - —
l.c.l. same basis lb. .18¾ - —
tanks, same basis lb. .15¼ - —
Borihorate, dms. l.c.l. lb. .31 - —
Diethyl ether, dms. c.l., works. lb. .47½ - —
l.c.l., works lb. .48¼ - —
Monobutyl ether, dms., c.l., dlvd. E lb. .30¾ - —
l.c.l. dlvd E lb. .31¾ - —
tanks, dlvd E lb .28¼ - —
Acetate, dms., c.l., works. lb. .30¼ - —
l.c.l. works lb. .31 - —
tanks, dlvd E lb. .28¼ - —
Monoethyl ether, dms., c.l., dlvd lb. .22½ - —
l.c.l., dlvd lb. .23½ - —
tanks, dlvd lb. 20 - —
Acetate, dms., c.l., works. lb. .27¼ - —
l.c.l., works lb. .28 - —
tanks, dlvd E lb. .25¼ - —
Monomethyl ether, dms., c.l., dlvd lb. .20½ - —
l.c.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .18½ - —
Diethylenetriamine, dms. c.l. dlvd E lb. .44 - —
l.c.l. dlvd E lb. .45 - —
tanks, dlvd E lb 41½ - —
Diethylstilbestrol, USP, bots., 10 kilo lots kilo. 100.00 - 147.50
1 kilo lot kilo. 110.00 - 152.50
Digitalis leaves, USP, dom dms. lb. 1.35 - —
Digitoxin, USP, bots gram. 4.40 - 5.00
Diglycol laurate, dms lb. .32¾ - .34
Stearate, dms., ton lots lb. .26 - .28
Dihexyl sebacate, dms., c.l., works. lb .64 - —
l.c.l. works lb. 64½ - .65
tanks, works lb 62 - —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0850 - .0875
Sulfate, bulk gram. .0850 - .0875
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenylmethane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
l.c.l., dlvd. lb. .18 - —
tanks, dlvd lb. .14½ - —
Phthalate, dms., c.l., dlvd E lb. .31½ - —
l.c.l., same basis lb. .32½ - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
l.c.l., dlvd. E lb. .11½ - —
tanks, dlvd E lb .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .31 - —
l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½ - —
Sebacate, dms., c.l. works lb. .63½ - —
l.c.l., works lb. .64½ - —
tanks, works lb .61 - —
Di-isopropylamine, dms., c.l., dlvd. lb. .23¼ - —
l.c.l. same basis lb. .24¼ - —
tanks, same basis lb .20¾ - —
Di-isopropylamine, dms., c.l., dlvd, E. of Rockies lb. .50½ - —
l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .48 - —
Dill seed, dewhiskered, bgs lb. .09¼ - —
nat., bgs lb. .08 - —
Dimethyl anthranilate, cns lb. 4.35 - 5.10
Ethanolamines, anhyd., dms., c.l., dlvd. lb. 1.225 - —
l.c.l., dlvd lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained amines lb. .68½ - —
l.c.l., dlvd., 100% basis lb. .69½ - —
tanks, dlvd, 100% basis lb. .66 - —
Hydroquinone, dms. lb. 2.20 - 2.25
Phthalate, dms., c.l., works lb. .31 - —
l.c.l., works lb. .32 - —
tanks, works lb. .28½ - —
Sebacate, dms., c.l., works lb. 1.275 - —
l.c.l., dlvd. lb. 1.285 - —
tanks, works lb. 1.25 - —
Sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
l.c.l. works lb .16 - —
10-gal. ret. dms., l.c.l. works. lb. .16¼ - —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
l.c.l., frt. equald lb. .42½ - —
tanks, frt. equald lb. .33 - —
40% soln. dms. c.l., frt. equald lb. .39 - —
l.c.l. frt. equald lb. .39½ - —
tanks, frt. equald lb. .36 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
l.c.l., frt. alld lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide dms. works. lb. .34 - .39
tanks works lb. .33 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald lb. .68 - —
smaller lots, frt. equald lb. 71 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89°C., dms lb .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt alld. E lb. .15¼ - —
l.c.l., frt. alld E lb. .15¾ - —
tanks, frt. alld E lb. .15 - —

2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E lb. .20¼ - —
l.c.l. frt alld. E lb. .20¾ - —
tanks, frt. alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily, dms lb. .11 - —
refd., 63°C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½ - —
l.c.l. works lb. .43½ - —
tanks, works lb. .40 - —
Phthalate, dms., c.l., frt. alld lb. .30½ - .31
l.c.l., frt. alld lb. .31½ - .32
tanks, frt. alld lb. .28 - .28½
Sebacate, dms., c.l., works lb. .60½ - —
l.c.l., works lb. .61½ - 62½
tanks, works, dlvd lb .58 - 58½
1,4-Dioxane, dms., c.l., works lb .26¾ - —
l.c.l., same basis lb .29¼ - —
tanks, same basis lb .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. lb. .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse gal. .62 - —
steam-dist., dms., c.l., works, South gal. .59 - —
dlvd, N. Y. gal. .67 - —
tanks, works, South gal. .45 - —
Diphenyl, bbls, c.l., works lb. 15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c lower
Oxide, perfume grade, cns lb. .56 - 62
Phthalate, dms., c.l., works lb. .51¾ - —
l.c.l. works lb. .53¾ - —
Diphenylamine, refd., flake, bgs., c.l., works, frt equald lb. .33 - —
l.c.l., works, frt equald lb. .35 - —
fused, tanks works, frt equald. lb. .31 - —
tech., fused, tanks works, frt. equald lb. .30 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .52 - —
smaller lots, frt. alld. lb. .53 - —
Diphenylhydantoin-sodium USP, dms lb 5.00 - 5.60
Dipropylene glycol, dms. c.l., frt. alld. lb. .17¾ - —
l.c.l., same basis lb. .18¾ - —
tanks, same basis lb. .15¼ - —
Monomethyl ether, dms., c.l., dlvd E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. 18½ - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .62 - —
smaller lots, frt. alld lb. .63 - —
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock ton. 80.00 - —
Divinylbenzene, 20-25% dms., c.l., works, frt equald lb .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. 19 - —
50-60% dms. c.l. works, 100% basis lb 1.00 - —
l.c.l. works, 100% basis lb 1.05 - —
Dodecylbenzene, dms., c.l., frt. alld lb. .14 - —
l.c.l. same basis lb. .15 - —
tanks, same basis lb. 12 - —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—
Blue FD & C No 1 lb. 15.65 - 17.60
No 2 lb 15.65 - 17.60
Green FD & C, No. 1 lb. 15.65 - 17.60
No 2 lb 19.60 - 22.85
No 3 lb 21.30 - 35.90
Red, FD & C, No 1, cns lb 5.90 - 7.85
No 2 lb 3.30 - 4.10
No 3 lb 19.60 - 22.85
No 4 lb 5.55 - 7.50
Violet, FD & C, No. 1, cns lb 15.65 - 17.60
Yellow, FD & C, No 1, cns lb 9.15 - 11.05
No 5 lb 3.30 - 4.10
No 6 lb 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb and 1 lb lots, dlvd:—
Black, D&C, No 1 lb. 10.50 - 10.95
Brown, D&C, No 1 lb 15.65 - 16.10
Green, D&C, No. 5 lb 15.65 - 16.10
No 6 lb 15.65 - 16.10
No 7 lb 14.35 - 14.80
Orange, D&C, No. 3 lb 10.50 - 10.95
No 4 lb 19.60 - 20.05
No 5 lb 5.25 - 5.70
Red, D&C, No. 17 lb. 10.50 - 10.95
No 18 lb. 23.55 - 24.00
No 19 lb. 15.60 - 15.45
No 21 lb 3.10 - 3.60
No 22 lb 10.50 - 10.95
No. 28 lb. 24.20 - 24.65
No 33 lb 17.60 - 17.45
Violet, D&C, No 2 lb. 15.65 - 16.10
Yellow, D&C, No. 7 lb 10.50 - 10.95
No 8 lb 10.50 - 10.95
No 10 lb. 13.05 - 13.50
No 11 lb 13.05 - 13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd.:—
Blue Ext. D&C, No. 1, cns lb. 15.65 - 16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 - 16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 - 13.50
Yellow, Ext. D&C, No. 1, cns lb. 10.50 - 10.95
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd., No.
20 Chrysoidine Y, dustless lb .89 - —
27 Fast light, orange 2G lb. 1.29 - —
31 Phloxine 2G lb. 1.05 - —
36 Yellow 2G lb. 1.18 - —
40 Orange R, extra, conc lb. 1.52 - —
57 Fuchsine 6B lb. 1.55 - —
79 Scarlet 2R lb. 1.16 - —
151 Orange AD lb. .79 - —
161 Orange RR lb. .94 - —
176 Fast red A lb. 1.39 - —
179 Rubine XX, conc lb. 1.48 - —
180 Blue F4B lb. 1.31 - —
185 Brilliant scarlet 3RN, conc. lb. 1.20 - —
202 Chrome blue black R, conc. lb. 1.07 - —
203 Chrome black T lb. .94 - —
208 Fast blue SR lb. 1.30 - —
216 Chrome red B lb. 1.09 - —
234 Brown Y lb. 1.27 - —
246 Blue black, extra, conc lb. 1.37 - —
275 Milling red 3R, conc lb. 1.91 - —
289 Navy blue 3R, conc lb. 1.70 - —
299 Black F, conc lb. 2.19 - —
304 Neutral black 2B, conc. lb. 2.61 - —
326 Fast scarlet 4BNC lb. 2.12 - —
332 Bismark brown RX, conc., dustless lb. 1.37 - —
365 Brilliant yellow, conc lb. 3.67 - —
382 Scarlet B lb. 2.60 - —
401 Diazo black BHD lb. .93 - —
406 Blue 2B, extra conc lb. 1.53 - —
419 Red FC lb. 1.45 - —
420 Brown M lb. 1.40 - —
448 Red 4BX, conc lb. 1.69 - —
518 Diamine sky blue FF, extra, conc lb. 1.95 - —
561 Brown B lb. 2.89 - —
581 Black EB, 200% lb. 1.13 - —
593 Green BY, conc lb. 1.03 - —
596 Yellow brown K, extra lb. 1.26 - —
620 Yellow 2G lb. 1.31 - —
639 Fast Yellow GG lb. 2.32 - —
640 Yellow XX lb. 2.30 - —



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_____

1-6

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

655	Yellow OX	lb.	2.64	•	—
657	Green V	lb.	2.73	•	—
662	Brilliant green G	lb.	3.62	•	—
667	Milling green 6B, conc	lb.	4.78	•	—
671	Blue EG	lb.	1.98	•	—
681	Crystal violet powder	lb.	2.15	•	—
698	Violet 6BN powder	lb.	2.25	•	—
720	Brilliant blue BBG	lb.	2.44	•	—
729	Blue B, extra conc	lb.	3.61	•	—
749	Red BX	lb.	5.62	•	—
800	Chinoline yellow ZSS	lb.	2.67	•	—
814	Yellow NN, conc	lb.	3.67	•	—
841	Safranine GF, extra, conc.	lb.	4.11	•	—
860	Induline base ZM	lb.	1.07	•	—
865	Nigrosine J	lb.	4.76	•	—
922	Blue GXX	lb.	2.22	•	—
978	Black GXCF, conc	lb.	.38	•	—
1034	Alizarine red SC	lb.	2.85	•	—
1054	Alizarine blue SAPX	lb.	3.78	•	—
1078	Alizarine green CG, extra.	lb.	3.53	•	—
1085	Alizarine blue black B	lb.	3.02	•	—
1096	Golden orange GFD, single paste	lb.	2.58	•	—
1099	Dark blue BO, single paste.	lb.	2.28	•	—
1101	Jade green N supra double paste	lb	1.10	•	—
1106	Blue RS, double paste	lb.	3.85	•	—
1113	Blue, BLFD, double paste.	lb.	2.93	•	—
1150	Olive R, single paste	lb.	1.42	•	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No

1151	Brown R, single paste	lb.	2.29	•	—
1171	Indigo synthetic, 20% paste.	lb.	.31	•	—
1217	Orange RD, double powder.	lb.	4.60	•	—
p-4	Brown PG	lb.	3.00	•	—
p-14	Brown EB	lb.	2.16	•	—
p-24	Gray L	lb.	2.08	•	—
p-80	Diazo brilliant scarlet ROAD	lb.	3.62	•	—
p-202	Diazo black VJ, conc	lb.	2.48	•	—
p-244	Brilliant scarlet BN	lb.	1.70	•	—
p-313	Naphthol SWF	lb	2.24	•	—

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.

24	Oil orange Z-7078	lb	1.06	•	—
73	Oil scarlet BL	lb.	1.70	•	—
1073	Oil violet ZIRS	lb.	6.81	•	—
1078	Alizarine cyanine green base Z	lb	6.13	•	—
1080	Oil violet special Z	lb.	6.81	•	—
	Oil black ZBC	lb	4.46	•	—
	Oil black ZBD	lb.	3.03	•	—
	Oil black ZHH	lb.	4.61	•	—
	Oil black ZMM	lb	6.52	•	—
	Oil blue ZN	lb	8.02	•	—
	Oil blue ZV	lb	4.95	•	—
	Oil orange ZMG	lb.	1.32	•	—
	Oil red Z-1700	lb	1.49	•	—
	Oil yellow ZG, conc	lb.	6.33	•	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd.

p-517	Spirit yellow ZR	lb.	4.62	•	—
p-520	Spirit orange ZR, conc	lb.	5.87	•	—
	Spirit black ZRB	lb.	2.95	•	—
	Spirit brown ZG	lb.	5.30	•	—
	Spirit red ZB, conc	lb.	6.41	•	—

E

Echinacea root, bls		lb.	1.10	•	—
Egg albumin (see Albumin).					
Yolk, dried, dom., bbls		lb.	1.05	•	1.07
tanners, bbls		lb.	.06	•	.06½
Elm bark, grinding, bls		lb.	.30	•	.32
powd., bbls., bxs		lb.	.45	•	—
select, bundles		lb.	.75	•	—
Emetine hydrochloride, USP, bots		oz.	48.25		49.00
Endrin, tech., dms., dlvd., 100% basis		lb.	3.75	•	—
Ephedrine, syn., USP, anhyd., bots. 100-oz lots		oz.	.98	•	1.00
hydrous, bots. 100-oz lots		oz.	.92	•	—
Hydrochloride, tins, 100-oz. lots.		oz.	.65	•	.75
Sulfate, cryst., tins, 100-oz. lots.		oz.	.65	•	.72
powd., tins, 100-oz. lots		oz.	.66	•	.73
Epichlorohydrin, dms., c.l., dlvd		lb.	.35	•	—
l.c.l., dlvd		lb.	.36	•	—
tanks, dlvd		lb.	.33	•	—
l-Epinephrine, base syn., USP, bots., 100 gram lots		gram.	.60	•	—
Epsom salt (see Magnesium sulfate).					
Ergot, NF dms., tin-lined		lb.	2.00	•	—
Eserine salicylate, bots		oz.	72.50		84.00
Sulfate, bots		oz.	87.75	•	—
Ether (see specific product).					

Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld

		lb.	.14½	•	—
	l.c.l., frt. alld	lb.	.15½	•	—
	tanks, frt. alld	lb.	.12	•	—
95-98%, dms., c.l., frt. alld.		lb.	.14¾	•	—
	l.c.l., frt. alld	lb.	.15¾	•	—
	tanks, frt. alld	lb.	.12¼	•	—
99%, dms., c.l., frt. alld		lb.	.15	•	—
	l.c.l., frt. alld	lb.	.16	•	—
	tanks, frt. alld	lb.	.12½	•	—
syn., 85-88%, dms., c.l., dlvd.		lb.	.14½	•	—
	l.c.l., dlvd	lb.	.15½	•	—
	tanks, dlvd	lb.	.12	•	—
95-98%, dms., c.l., dlvd		lb.	.14¾	•	—
	l.c.l. dlvd	lb.	.15¾	•	—
	tanks, dlvd	lb.	.12¼	•	—
99%, dms., c.l., dlvd		lb.	.15	•	—
	l.c.l., dlvd	lb.	.16	•	—
	tanks, dlvd	lb.	.12½	•	—
Acetoacetate, dms., c.l., dlvd		lb.	.58½	•	—
		lb.	.58½	•	—
	l.c.l., dlvd	lb.	.59½	•	—
tanks, dlvd		lb.	.56	•	—
Acrylate, dms., c.l., t.l., dlvd.		lb.	.36	•	—
	t.t.l. dlvd	lb.	.37	•	—
tanks, dlvd		lb.	.34	•	—
Aminobenzoate, USP (see Benzocaine)					
Amyl keytone, dms, c.l., dlvd		lb.	.20	•	—
	l.c.l., same basis	lb.	.21	•	—
	tanks, same basis	lb.	.17½	•	—
Benzoate, bots		lb.	.74	•	.90
Bromide, tech., 98%, dms., c.l., frt. alld. E		lb.	.42	•	.44
	l.c.l., frt. alld. E	lb.	.44	•	.46
Butyl ketone, dms., c.l., works.		lb.	.36	•	—
	l.c.l., works	lb.	.36¾	•	—
	tanks, works	lb.	.34	•	—
Butyrate, works		lb.	.85	•	.90
Carbamate (see Urethane)					
Cellulose vis. 7 cps., bgs., 5,000-lb lots or more, works		lb.	.70	•	—
smaller lots, works		lb.	.72	•	.80
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb lots or more, works		lb.	.65	•	.70
smaller lots, works		lb.	.67	•	.81
Chloride, tech., cyl., works			.20	•	.22
dms., works		lb	.18	•	.20
tanks, works		lb.	.16	•	—
Cinnamate, cns		lb	3.35	•	3.45
Ether, absolute, ACS, dms		lb.	.27	•	—
anesthesia, USP, hospitals, 1-lb. cns		lb	1.01	•	—
½-lb cns		lb.	1.11	•	—
¼-lb cns		lb.	1.21	•	—
Indust., dms., c.l., dlvd		lb.	.12½	•	—
l.c.l., dlvd. E		lb.	.13½	•	—
tanks, dlvd E.		lb.	.10	•	—
Gallate, dms., 100 to 2,000-lb lots		lb.	3.90	•	4.40
Iodide, cbys., works		lb.	3.30	•	—
Methacrylate, dms., c.l., and less than truckload, works, frt. equald		lb	.51½	•	.53
Morphine hydrochloride, USP, bots.		oz.	11.85	•	—
Nitrite (see Nitrous ether).					
Oenanthate, dms.		lb	1.00		1.50
Oleate, dms, l.c.l., works		lb.	No prices.		
Oxalate (see Diethyl oxalate)					
Silicate dist. (see Tetraethyl orthosilicate).					
40% available SiO_2, dms. c.l., dlvd		lb.	.44½	•	—
l.c.l., dlvd		lb.	.45½	•	—
tanks, dlvd		lb.	.42	•	—
Ethylethanolamines, mixed, dms., c.l., dlvd. E		lb.	.43½	•	—
l.c.l. dlvd E		lb.	.44½	•	—
tanks, dlvd. E		lb.	.41½	•	—
N-Ethyl-a-naphthylam'ne, dms. works.		lb	1.02	•	—
N-Ethyl-o-toluidide, bbls.		lb.	.88	•	—
Ethylamine (see Mono, Di- or Tri-)					
N-Ethylaniline dms. c.l. frt. alld.		lb.	.57	•	—
l.c.l., frt. alld		lb.	.58	•	—
tanks, frt. alld		lb.	.55	•	—
Ethylbenzene, 99% dms., c.l., or t.l., frt. equald		lb.	.17	•	—
l.t.l. same basis		lb.	.18	•	—
tanks, same basis		lb.	.15	•	—
Ethylene dichloride dms. c.l. dlvd.		lb.	.11½	•	—
l.c.l., same basis		lb.	.12½	•	—
tanks, same basis		lb.	.09	•	—
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.					
Glycol, indust., dms., c.l., dlvd. E		lb.	.16	•	—
l.c.l., same basis		lb.	.17	•	—
tanks, same basis		lb.	.13½	•	—
Monobutyl ether, dms., c.l., dlvd. E		lb.	.22	•	—
l.c.l., dlvd E		lb.	.23	•	—
tanks, dlvd. E		lb.	.19½	•	—
Monoethyl ether, dms., c.l., dlvd. E		lb.	.21	•	—
l.c.l., dlvd. E		lb.	.22	•	—
tanks, dlvd. E		lb.	.18½	•	—
Acetate, dms., l.c., dlvd E.		lb.	.19½	•	—
l.c.l., dlvd E		lb.	.20½	•	—
tanks, dlvd. E		lb.	.17	•	—
Monomethyl ether, dms., c.l., dlvd. E		lb.	.21	•	—
l.c.l., dlvd. E		lb.	.22	•	—
tanks, dlvd. E		lb.	.18½	•	—
Acetate, dms., l.c., dlvd. E.		lb.	.29	•	—
l.c.l. dlvd. E		lb.	.29¾	•	—
tanks, dlvd. E		lb.	.27	•	—
Monostearate, triple pressed, dms		lb.	.33	•	.35
Oxide, dms., c.l., dlvd E		lb.	.21½	•	—
l.c.l. dlvd. E		lb.	.24½	•	—
tanks, dlvd. E		lb.	.15½	•	—
Trichloride (see Trichloroethane).					
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis		lb.	.42	•	—
l.c.l., dlvd. E., 100% basis		lb.	.43	•	—
tanks, dlvd. E., 100% basis		lb.	.40	•	—
Ethylvanillin, cns., 25-lb. lots		lb.	6.20	•	6.25
Eucalyptol, USP, cns., dms.		lb.	1.25	•	1.40
Eugenol, USP, bots		lb.	2.23	•	2.60
Euphorbia herb, bls		lb.	.15	•	.17

F

Feldspar, 140-200 mesh, bulk, c.l., works		ton.	19.50	•	—
Feldspar in bags $3 per ton higher.					
Fennel seed, Argentine, bgs		lb.	.13½	•	—
Czech, medium, bgs		lb.	.09	•	—
Indian, light, bgs		lb.	.13½	•	—
Roumanian, bgs		lb.	.09	•	—
Fenugreek seed, Indian, bgs		lb.	.08½	•	.09
Moroccan, bgs		lb.	.08½	•	.09
Ferric acetate liquor, 28°, bbls., c.l., works		lb.	.09	•	—
l.c.l., works		lb.	.09¾	•	—
soln., USP IX, cbys		lb.	.16	•	—
dms.		lb.	.17	•	—
Chloride, anhyd., tech., dms., c.l., works	100	lbs.	7.00	•	—
l.c.l., works	100	lbs.	7.85	•	—
indust., cryst., bbls., c.l., works.	100	lbs	5.25		6.75
l.c.l., works	100	lbs.	5.75		7.25

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ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol • Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

Ferric chloride, 42° Be., photo grade, cbys., c.l., works	100 lbs.	7.25	8.25
sewage grade, tanks, frt. equald, 100% basis.	100 lbs.	3.50	—
USP cryst. dms. works	lb.	.07¼-	.09
Citrate, gran., dms	lb.	.86	—
Hypophosphite, NF dms	lb.	3.45	—
Naphthenate, liq. 6% Fe, dms., frt. alld	lb.	.25¾-	—
Oxalate gran. dms	lb.	.83	.87
Oxides (see oxides under Black, Brown, Red, and Yellow.)			
Phosphate NF soluble, gran., pearls cs	lb.	.64	.65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb lots	lb.	40½-	—
Resinate, 6¾% Fe., dms., frt. alld	lb.	.29½-	—
Stearate, dms., c.l., frt. alld	lb.	.39	—
l.c.l., frt. alld	lb.	.40	.44
Sulfate, partly hydrated, bgs., c.l., works	ton.	35.25	—
l.c.l., works	ton.	36.25	42.25
bulk, c.l., works	ton.	33.25	—
Ferric-ammonium citrate, brown, pearls, NF, gran., dms	lb.	.65	.68
green pearls USP XII, gran., dms	lb.	.66	.69
Oxalate fine gran., dms	lb.	25½-	28½
Ferric-potassium oxalate, fine gran., dms	lb.	.30½-	.33½
Ferric-sodium oxalate, fine gran., dms	lb.	25½-	28½
Ferrous gluconate, NF, dms	lb.	.94	—
Sulfate, gran., bgs., c.l., works.	ton.	34.50	—
l.c.l., dlvd, Metropolitan area	100 lbs.	3.35	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP, cryst., bbls., dms	lb.	.09½-	.10
Fir, balsam, Canada, cns	gal.	32.00	—
Oregon, bbls	gal.	4.50	—
Fishliver oil (see Oil fishliver)			
Fishmeal, dom., menhaden, 60% protein grd. bgs., Chesapeake Bay area	ton.	140.00	—
scrap, same basis	ton.	137.00	—
Fleaseed (see Psyllium seed)			
Formaldehyde, 37% (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd	lb.	.0715-	—
tanks, dlvd	lb.	.0450-	—
(12 to 15% methanol), USP, dms., c.l., dlvd	lb.	.0740-	—
tanks, dlvd	lb.	.0475-	—
(uninhibited, methanol-free), tanks, dlvd	lb.	.0420-	—
Fringetree bark, bls	lb	60	.61
Fullers' earth bgs. c.l. fll mines	ton.	19.00	—
powd., insecticide grade, dried. bgs. c.l., Ga. or Fla mines	ton.	17.50	—
calcined bgs. c.l., same basis	ton.	20.00	21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis	ton.	16.30	17.00
200-mesh bgs. c.l., same basis	ton.	17.50	18.00
spent bgs. c.l. shipt point	ton	4.50	5.00
Furfural dms. c.l., works	lb	13	—
l.c.l. works	lb	14	—
tanks, dlvd E	lb	12	—
dlvd W	lb	13	—
Fusel oil, refd., dms., c.l. dlvd	lb	18	—
l.c.l. dlvd	lb	19	—
tanks, dlvd	lb	15½-	—
Fustic extract, crvst. No. 1, bbls., l.c.l	lb	47½-	—
No. 2 bbls. l.c.l	lb	45½-	—
No. 3 bbls., l.c.l	lb	43½-	—
liq., No. 1, bbls., l.c.l	lb.	22½-	—
No. 2 bbls. l.c.l	lb	21½-	—
No. 3 bbls., l.c.l	lb	19	—
solid No. 1 bxs., l.c.l	lb	45	—

G

G salt, bbls., frt. alld, 100% basis	lb.	.73	—
Gammapicoline (see g-Picoline)			
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l.	lb.	.53	—
150 Bloom test, bbl., c.l.	lb.	.64	—
200 Bloom test, bbls., c.l	lb.	.70	—
225 Bloom test, bbls., c.l	lb.	.73	—
275 Bloom test, bbl., c.l	lb.	.81	—
Gelsemium root, bls	lb.	.26	—
Gentian root, bls	lb.	.23	—
grd., bbls., bxs	lb.	.27	—
powd., bbls., bxs	lb.	.27	—
Geraniol, extra, cns., dms.	lb.	3.95	—
standard, cns., dms.	lb.	3.75	—
Geranyl acetate, cns.	lb.	3.95	—
Ginger oleoresin, NF from African root, bots	lb	4.00	7.75
from Jamaican root, bots	lb	6.00	10.25
Root, African, bls.	lb.	.33	—
Cochin, bgs	lb.	.26½-	—
Jamaican, No. 2, bgs	lb.	.76	—
No. 3 bgs.	lb.	.75	—
Nigerian, split, bgs	lb.	.23	—
Glauber's salt anhyd (see Sodium sulfate)			
Glue, bone, extracted, dry bone, 86 jellygrams bgs., c.l., dlvd	lb.	.15	—
104 jellygrams, same basis	lb.	.17	—
131 jellygrams, same basis	lb.	.18	—
164 jellygrams, same basis	lb.	.20½-	—
191 jellygrams, same basis	lb.	.21	—
222 jellygrams, same basis	lb.	.22	—
Green, 40 jellygrams, bgs., c.l., dlvd	lb.	.13½-	—
65 jellygrams, same basis	lb.	.13¾-	—
86 jellygrams, same basis	lb.	.14	—
115 jellygrams, same basis	lb.	.14½-	—
135 jellygrams, same basis	lb.	.15	—
164 jellygrams, same basis	lb.	.16	—
180 jellygrams, same basis	lb.	.17	—
200 jellygrams, same basis	lb.	.18½-	—
Bone glue t.c.l. prices 1c. higher.			
Hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.15	—
95-121 bgs., c.l., dlvd	lb	16	—
122-149, bgs., c.l., dlvd	lb.	.18½-	—
150-177, bgs., c.l., dlvd	lb.	.21	—
178-206, bgs., c.l., dlvd	lb.	.23½-	—
207-236, bgs., c.l., dlvd	lb.	.26	—
237-266, bgs., c.l., dlvd	lb.	.28	—
267-298, bgs., c.l., dlvd	lb.	.30	—
299-330, bgs., c.l., dlvd	lb.	.32	—
331-362 bgs., c.l., dlvd	lb.	.34	—
363-394, bgs., c.l., dlvd	lb.	.36	—
395-427, bgs., c.l., dlvd	lb.	.38	—
428-460, bgs., c.l., dlvd	lb.	.40	—
461-494, bgs., c.l., dlvd	lb.	.42	—
495-529, bgs., c.l., dlvd	lb.	.43	—
Hide glue t.c.l. prices 1c. higher.			
l-Glutamine, bots.	gram.	.65	—
Glycerine, nat., crude, saponification, 88%, to refineries, tanks	lb.	.16½-	.18¼
soaplye, 80%, tanks	lb.	.15	.16¾
refd., CP USP 99%, dms., c.l., dlvd	lb.	29⅞-	—
t.c.l., dlvd	lb.	.29⅞-	—
tanks, dlvd	lb.	.27⅞-	—
Glycerine, refd., CP, USP, 96%, dms., c.l., dlvd	lb.	.28½-	—
t.c.l., dlvd	lb.	.29	—
tanks, dlvd	lb.	.27	—
high gravity, dms., c.l., dlvd.	lb.	.29¼-	—
t.c.l., dlvd	lb.	.29¾-	—
tanks, dlvd	lb.	.27¾-	—
yellow, refd., high gravity	lb.	.28½-	—
t.c.l., dlvd.	lb.	.29	—
syn., dms., c.l., dlvd	lb.	29½-	—
l.c.l., dlvd.	lb.	.30	—
tanks, dlvd	lb.	.28	—
Glycine (see Acid aminoacetic).			
Glycerol (see Glycerine).			
Glyoxal, 30%, dms., c.l., works	lb.	.20½-	—
l.c.l., works	lb.	.21¼-	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	3.50	—
Graphite, amorph., powd., bgs., fib. dms., ex whse	lb.	.06	.09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21½
90-92% powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice all hog tanks, dlvd	lb.	.08½	Nom.
yellow, tanks, dlvd	lb.	.06¾-	.07
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works	lb	5.10	—
tungstated PTMA kgs. works.	lb	6.40	—
Green, chrome, CP dark, light, medium blue content 1 to 15%, bbls., N. of Tenn. and N.C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis	lb.	.40	.42
16-30%, bbls., same basis	lb.	.40	.42
31-45%, bbls., same basis	lb.	.41	.43
45-49%, bbls., same basis	lb.	.44	.46
color, 25%	lb.	.19	.20
Chrome green prices are ½c. higher, dlvd at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss N. C., S. C., Tenn., Texas (Dallas, Ft Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld	lb.	1.20	—
pure, bgs. c.l., frt. alld	lb.	44¾-	—
l.c.l. same basis	lb.	45½-	—
Dyes (see Dyes, coaltar).			
Malachite straight, PTMA, bbls., works	lb.	5.30	—
Paris (see Paris green).			
Phthalocyanine toner bbls., works.	lb.	3.95	—
resinated, bbls	lb.	3.50	—
water dispersable, bbls	lb.	1.71	—
Pigment B kegs	lb.	1.35	—
Grindelia robusta herb, bls	lb.	.38	.40
Guaiacol NF, cryst, dms, tins	lb	2.10	2.13
liq., cbys., dms	lb	2.30	2.40
Carbonate, NF VII, dms	lb	3.40	3.45
Gum, aloe (see Aloe).			
Arabic, amber, sorts, bgs	lb.	.21	.23
powd., USP, bbls	lb.	.27	.29
Asafetida (see A).			
Asphaltum (see A)			
Benzoin, Sumatra, cs	lb.	.33	—
Camphor (see C).			
Cellulose, high vis. bgs. 23,000 lb lots or more, works, frt. alld	lb.	.55	—
smaller lots, same basis	lb	57	—
Copal, Congo, No. 1, bgs.	lb	.22½-	.25
No. 2, bgs.	lb.	.18½-	.20
No. 3, bgs.	lb.	15¼-	.17
Manila, C, bgs	lb.	.35½-	.39
CBB bgs.	lb	No stocks.	
DBB, bgs	lb.	.26	.28¼
DK, bgs	lb	No stocks.	
dust, bgs	lb	.14	Nom.
MA, soft, bgs	lb.	.18½	.21
WS bgs.	lb	No stocks.	
Philippine, pale, chips, bgs	lb.	.21½-	.24
nubs, bgs	lb.	.31¾-	.34
seeds, bgs	lb	.20	.22
sorts, bgs	lb.	.19¾-	.22
Pontianak, chips, ngs.	lb.	.26	—
nubs, bgs	lb.	.37¾-	.40
Dammar, Batavia, A/E cs	lb.	No stocks.	
dust, bgs	lb.	.16	.18
E, bgs	lb.	.20	.22

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Gum, dammar, East India, batu, bold, bgs. lb. .13½ - .15
nubs and chips, bgs. lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs. lb. .11¾ - .13
nubs and chips, bgs. lb. .11½ - .13
pale, chips, bgs. lb. .12¾ - .14
nubs, bgs lb. .17 - .19
Siam, cs. lb. .36½ - .39
Singapore, No. 1, bgs lb. .44¼ - .46
No 2, bgs. lb. .31¾ - .33
No. 3, bgs lb. No stocks.
dust, bgs lb. .16 - .18
seeds bgs lb 20 - .22
Ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl States, N. E States, Minneapolis N. C., Ohio, St Louis, St. Paul Va. W Va lb. .14½ - .16
Wood-rosin type, dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs. lb. .50 - —
tech. grade, bgs lb. .40 - —
Karaya, No. 1, NF, powd., bbls lb. .50 - —
No. 2, powd., bbls lb. .35 - .38
No. 3, powd., bbls lb. .32 - .35
Locust bean, powd., bgs lb. .50 - —
Myrrh, cs lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs lb. .20 Nom.
tears cs lb .22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth, No. 1, ribbons, cs lb. 4.50 - 4.70
No. 2, cs lb. 3.50 - 3.75
No. 3, cs lb. 3.25 - 3.40
powd., USP, bbls lb. 1.25 - 1.38
Gypsum, plaster of paris, 100-lb. paper bgs. trucks, dlvd. f.o.b. N Y C ton. 20.30 - —
Terra alba, dom. paper bgs., same basis ton. 20.00 - —
works, N. Y C ton. 17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C ton. 55.00 - —
ex warehouse ton. 60.00 - 62.00

H

Hawthorn berries, bgs lb. .21 - —
Heliotropin, 100-lb. lots, dms lb. 3.00 - 3.25
Hellebore root dom., green bls lb. .70 - .75
Helonias root, bls lb 1.75 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No 2, bbls., l.c.l lb. .43 - —
No 3, bbls., l.c.l lb. .41 - —
No 4 bbls., l.c.l lb .39 - —
No 5, bbls., l.c.l lb. .37 - —
paste No. 1, bbls., l.c.l. lb. .20½ - —
Henbane leaves, bls lb. .35 - .40
Heptane indust. tanks Bayonne, N. J. gal. .20 - —
Baytown, Tex. gal. .16¼ - —
Borger, Tex. gal. .16¼ - —
Hesperidin, purif., 25 lb. lots, f.o.b., works lb 8.93 - —
Methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
5-lb lots, works lb. 23.00 - —
1-lb lots, works lb. 23.50 - —
Hexachlorophene, dms lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or N.Y.C. lb. .233 - —
1,000-19,999 lb lots, same basis lb. .243 - —
smaller lots, same basis lb. .253 - —
fib dms. 1,000-lb lots or more, same basis lb. .250 - —
smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N J., dlvd. N. Y C. and Philadelphia lb. .42½ - —
smaller lots, same basis lb. .43½ - 48½
Hexane indust tanks Bayonne, N. J. gal. .20 - —
Baytown, Tex. gal. .17 - —
Borger, Tex. gal. .17 - —
1-Hexanol, dms., c.l. works lb .35 - —
l.c.l. works lb. .35¾ - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb 4.00 - 7.50
Salicylate, dms lb 1.75 - —
Hexylene glycol dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
α-Hexyl methacrylate, dms., less than truckload works lb 71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP bots oz 5.50 - —
Methylbromide, USP, bots oz. 3.90 - —
Hoofmeal 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb .16 - .19
Hydrastis (see Goldenseal).
Hydrazine free base, 1 et dms., works lb No stocks.
Hydrate, 85%, ret. dms., works lb 1.55 1.55
100%, ret. dms., works lb 1.60 1.90
Hydrocortisone acetate, bulk, bots., up to 500 gms gm. 4.75 - —
Alcohol, bulk, bots., up to 500
Hydroturamide dms. fib. ctns., works lb 30 .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb 45 - —
l.c.l., works lb .55 .60
Fluoride anhyd., cyls., dlvd. E lb .30½ - .32½
dlvd W lb .39 - —
tanks, works lb .21 - —
Peroxide, USP bbls., dlvd lb. .03¾ - .05
35%, dms., c.l., dlvd lb .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. 1800 - —
Hydroquinone, pnoto grade, bbls., dms lb. 1.03 - 1.06
tech., dms., c.l., dlvd lb. .82½ - —
l.c.l., dlvd lb 84½ - —
Hydroxycitronellal, cns lb. 6.00 - 7.45
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract, cryst. No 2, bbls., l.c.l lb .52 - —
liq., No. 1, bbls., l.c.l lb .35 - —
No 2, bbls., l.c.l lb .27 - —

I

Ichthammol, NF, jars lb. 75 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb 16.50 - 21.00
Inositol bots, dlvd lb 5.00 - —
dms., dlvd lb 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb 1.10 - —
resub., USP, dms., jars lb 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 - —
Iodoform, NF, dms., kgs lb. 4.90 - 5.00
a-Ionone, cns lb. 5.25 - 5.40
b-Ionone, cns lb. 5.40 - 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb. .28 - .34
Iron compounds (see Ferric or Ferrous). Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .46 - .70
Formate, dms lb. .80 - —
Propionate, dms lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .14¾ - —
l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27½ - —
l.c.l., dlvd lb. .28½ - —
tech., dms., c.l., dlvd lb. .21½ - —
l.c.l., dlvd lb. .22½ - —
tanks, dlvd lb. .19½ - —
Isoeugenol, cns lb. 3.60 4.40
Isoniazid, powd., bulk, 25-kilo lots or more kilo. 23.00 - 25.50
smaller lots kilo. 24.00 - 26.00
Isopentane, coml. grade, tanks, f.o.b. Tex, refy gal. .15½ - —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24½ - —
l.c.l., works lb. .25¼ - —
tanks, works lb. .22½ - —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .13½ - —
l.c.l., same basis lb. .14½ - —
tanks, same basis lb. .11 - —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l., dlvd lb. .08 - —
tanks, dlvd lb. .05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 - —
l.c.l., works lb. .714 - .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works. lb. .75 - —
l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25

J

Jalap root, NF, bls lb. NP - —
powd., bbls., bxs lb. NP - —
Juniper berries, bgs lb .18 - .20
Tar, NF, dms lb .42 - .60

K

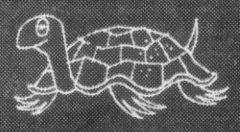
Kaolin (see also Clay, China).
NF, powd., fib. dms lb. .10 - .12
colloidal, fib. dms lb. 15½ - .17½
Kola nuts, bgs lb. .15 - —

L

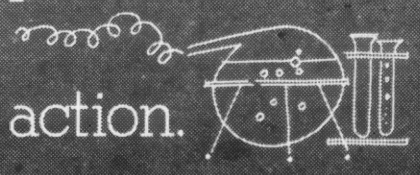
Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
6,000-lb. lots, frt. equald lb. .14½ - —
2,000-lb. lots, frt. equald lb. .14¾ - —
200-lb. lots, frt. equald lb. .15¼ - —
Edible lactose in fib. dms., ½c. higher.
fermentation grade, bgs., c.l., frt. equald lb. .08½ - —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½ - —
2,000-lb. lots, frt. equald lb. .22¼ - —
200-1,800-lb. lots, frt. equald lb. .22¾ - —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls lb. Nom. —
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works lb. .25 - .27
hydrous, dms., works lb. .24 - .26
Lard, cash, dms., Chicago lb. .1500 - —
Larkspur seed, bgs lb. .25 - —
α-Lauryl methacrylate, dms., c.l. or t.l. works lb. .65½ - —
Lavender flowers, medium, bls lb. .75 - .80
ord., bls lb. .25 - .40
select., bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .25½ - —
gran., bbls lb. .26½ - —
powd., bbls lb. .26½ - —
NF, cryst., gran., powd lb. .36½ - —
Arsenate, acid powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs. or more lb. .27½ - —
l.c.l., frt. alld lb. .28½ - —
1-lb. bgs., c.l. lb. .41½ - —
l.c.l. lb. .42½ - —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms lb .45 - —
Iodide, NF, V jars lb. 3.82 - —
Linoleate, fused, 26%% Pb, dms. lb. .33 - —
Metal, pigs, prime, N. Y lb. .16 - —
St. Louis lb. .1580 - —
Monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .2075 - —
Naphthenate, liq., 16% Pb., dms., dlvd lb. .17 - —
24% Pb. dms., dlvd lb. .21 - —
solid, 37% Pb., dms., dlvd lb. .27½ - —
Nitrate, bbls lb. .23¾ - —
Orthosilicate-silica gel, 50-60% PbO, dms., works lb. .29¾ - .34¼
Peroxide, tech., powd., bbls lb. .38¾ - .40¼
Phthalate, dibasic, dms., works lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld lb. .19 - —
l.c.l., same basis lb. .20 - —
97% Pb_3O_4, bbls., c.l., same basis lb. .192 - —
l.c.l., same basis lb. .202 - —
98% Pb_3O_4, bbls., c.l., same basis lb. .1935 - —
l.c.l., same basis lb. .2035 - —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½ - —
Salicilate, normal, dms., works lb. .46 - —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate, Lead, white basic sulfate).
Tallate, liq., 16% Pb, dms lb. .15 - —
24% Pb., dms lb. 18½ - —
solid, 30% lb. 23¼ - —
Lead, white, basic carbonate, bgs., c.l., shipt. point, frt. alld lb. .19 - —
l.c.l., same basis lb. .20 - —
Silicate, bgs., c.l., shipt. point, frt. alld lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
Sulfate, bgs., c.l., shipt. point, frt. alld lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .14 - .15
l.c.l., same basis lb. .16 - .17
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
l.c.l., same basis lb. .15 - .16
Lemon bioflavonoid complex, 25-lb. lots, works lb. 9.00 - —
dl-Leucine, dms., works lb 12.25 - 15.00
Licorice root, whole, bbls lb. .10 - .12
gran., bbls lb. .15 - .17
powd., bbls lb .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½ - —
t.c.l., works lb. .06¾ - —
Lime, chemical (quicklime), bulk, c.l., metropolitan N. Y. destination, freight equalized with nearest producing point ton. 20.32 - —
Hydrated, bulk, c.l., same basis. ton. 22.32 - —
Spray, bgs., c.l., same basis ton. 26.32 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 3.65 - 4.80
ex lignaloe wood oil, dms lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 3.30 5.10
96-98%, dms lb. 4.05 - 6.75
ex petitgrain, bots lb. 4.80 - 5.90
Lindane, 25% formulation, dealers, dms., frt. alld lb. 1.58 - 1.63
98% tech. formulators, dms., frt. alld lb. 2.65 - 3.25
Linden flowers with leaves, bls lb. .25 - —
without leaves, bls lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills ton. 56.50-57.00
extracted, 36% bulk same basis ton. 52.00 - 52.50
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .18 - —
l.c.l., same basis lb. .19 - —
Lithium benzoate, dms lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald lb. 2.43 - —
Carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½ - —
ton lots to t.l., dlvd lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld, works lb. .82 - —
t.c.l., same basis lb. .85 - 1.11½
Chloride, CP, anhyd., ton lots lb. 1.23½ - —
tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. 1.00 - 1.05
t.c.l., same basis lb. 1.05 - 1.05½
Citrate, NF, dms lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½ - —
ton lots, dlvd lb. 2.18½ - —
less ton lots, dlvd lb. 2.23½ - —
Hydride, powd., dms., 500-lots, works lb. 10.50 - 12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd. or works, frt. alld lb. .80 - .80½
t.c.l., same basis lb. .81 - .81½
Manganite, dms., works lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots. lb. 1.25 - —
Salicylate, dms. lb. 1.60 - 1.70
Silicate, dms., works lb. 1.10 - 1.30
Stearate, dms., c.l., works lb. .47½ - —
ton lots, works lb. .48½ - —
less-ton lots, works lb. .53½ - —
Sulfate, dms., 100-lb. lots lb. 1.15 - —
Titanate, dms., works lb. 1.25 - 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08 - —
l.c.l., dlvd. E lb. .08¾ - —
titanated (high-strength), bgs., c.l., dlvd lb. .10 - —
l.c.l., dlvd lb. .11 - —
Lobelia herb, bls lb. 1.50 - —
Lobeline sulfate, bots., works oz. 37.50 - 38.50
Logwood extract, cryst., No. 1, bbls., l.c.l lb. .41 - —
No. 2, bbls., l.c.l lb. .39 - —
liq., No. 1, bbls., l.c.l lb. .20 - —
No. 2, bbls., l.c.l lb. .19 - —
No 3, bbls., l.c.l lb. .18½ - —
solid No 1, boxes, c.l lb. .35 - —
Lycopodium, cs lb. 3.00 - 3.50
dl-Lysine monohydrochloride, fib. dms lb. 12.00 - —
l-Lysine, fib. dms lb. 12.00 - 13.00

M

Mace, Siauw, siftings, bls lb. 3.25 - —
West Indian, No. 1, bls. shipment lb. 3.25 - —
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼ - .26
syn. rubber grade, light, bgs., c.l., works lb. .29¼ - —
extra light, bgs., c.l., works lb. .29¼ - .30
t.c.l., works lb. .30 - —
USP, light, bgs lb. .35 - .36
heavy, fib. dms lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chawelah, Wash ton. 43.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½ - —
t.l., frt. equald lb. .11 - —
t.c.l., frt. equald lb. .12 - .13
USP, bgs., c.l., frt. equald lb. .12½ - —
t.l., frt. equald lb. .13 - —
t.c.l., frt. equald lb. .14 - .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾ - —
t.c.l., works lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton. 55.00 - —
t.c.l., works ton. 65.00 - 80.00
Gluconate, dms., cns lb. 1.34 - 1.41
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½ - .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼ - —
sticks, cs., works, frt. alld. on carlots lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works lb. .29 - —
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works lb. .10½ - .12
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
t.c.l. works 100 lbs 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal 100 lbs 3.10 - —
smaller lots 100 lbs 3.35 - —
Magnesium trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb. lots lb. .40 - —
100-lb. lots lb. .46 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malathion, dms., c.l., works lb. .90 - —
l.c.l., works lb. .92 - 1.02
Maleic anhydride, dms., c.l., dlvd. E. lb. .28½ - —
l.c.l., dlvd. E lb. .29½ - —
tanks, dlvd. E lb. .27½ - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls lb. .55 .60
Manganese acetate, bbls, dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½ - —
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs. gross for net, works ton. 148.00 - —
paper bgs., works ton. 144.50 - —
dms., works ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Gluconate, dms lb. 1.80 - 1.94
Hydrate, bbls, dlvd lb .36 - —
Hypophosphite, NF, dms lb 3.52 - —
Linoleate, liq., 4.35% Mn, dms. lb. .32½ - —
solid, precip., 8.2% Mn, bbls lb. .37½ - —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn, dms. lb. .24 - —
precip, 6½-7% Mn, dms lb .28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd S.E. ton. 88.55 - —
t.c.l., dlvd S E ton. 95.55 - —
Tallate, 6% dms lb .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton. 62.00 - —
So. American, 30% tannin, c.l., ex dock ton. 54.00 - 57.00
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
dms., to ton lots, works lb. .62 - —
single dm., works lb. .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
l.c.l., works lb. .31 - —
Menadione USP bots gram .044 - .05
Menthol, nat., USP, Brazilian, cs lb. 6.50 - 7.00
syn., USP, racemic, cns lb. 4.75 - —
Menthyl salicylate tins lb 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton-lots, works, frt. alld lb. .42 - —
less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .52 - —
less ton lots, same basis lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF, VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF fib dms lb 7.72 - —
Oxide, red, NF, powd., fib. dms lb. 5.97 6.01
Yellow, tech. (see Yellow mercuric oxide). USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb. per flask, net-flask. 255.00 - 257.00
Mesityl oxide, dms., c.l., dlvd lb. .14 - .14¼
l.c.l., dlvd lb. .15 - .15½
tanks, dlvd lb. .11½ - .12
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .75 - —
syn., Zone 1, dms., c.l., dlvd. or truckload min. frt. alld. gal. .48½ - —
l.c.l., works gal. .55½ - —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35½ - —
4,000 gal., min., frt. alld. or dlvd gal. .32½ - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .30 - —
Zone 2, dms., c.l. or truckload min. frt. alld. or dlvd gal. .51½ - —
l.c.l., works gal. .58½ - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd Metropolitan areas gal. .38½ - —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .35½ - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U S west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetretramine).
dl-Methionine, fib. dms., frt. alld. 50-lb or more lb. 3.50 - —
feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms., cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½ - —
t.c.l. same basis lb. .21 - —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1 lb. .21 - —
t.c.l., same basis lb. .21½ - —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich. Ind., Ill. Wis. St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½ - —
Acetone, syn., dms., c.l., frt. alld. E. gal. .63½ - —
l.c.l., frt. alld E gal. .69½ - —
tanks, frt alld. E gal. .48½ - —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four
Acrylate, dms., c.l., t.l., dlvd lb. .39 - —
t.t.l. dlvd lb. .40 - —
tanks, dlvd lb. .37 - —
Alcohol (see Methanol).
Amyl acetate, dms. c.l., dlvd. E. lb. .16½ - —
l.c.l., dlvd E lb. .17½ - —
tanks, dlvd E lb. .14 - —
Ketone, dms. works lb 1.05 - —
Anthranilate, cns lb. 2.35 2.65
Benzoate, cns., dms. lb. .60 .75

Lactose is slow to ferment, 

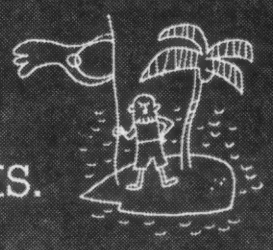
promotes maximum yields. Favors enzymatic



action. Acts as a superior

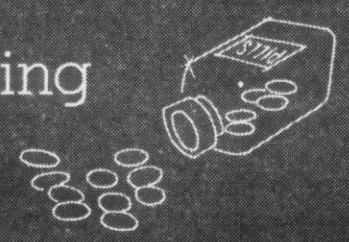
emulsifier

and absorbent. Valuable in



production of sequestering agents.

And, has excellent application as a

filler and coating 

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Works wonders on everything...from baby powder to tobacco filters.

Lactose is made up of pure milk sugar crystals, manufactured from milk solids. Forward looking individuals in the Drug Industry are finding the specific attributes of Lactose most beneficial in a myriad of products. It is colorless, innocuous, soluble, odorless, nearly tasteless *and* lower priced than ever before.

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Western Condensing Company's Lactose is uniform, high quality, and is efficiently mass produced in unlimited supply. Available in U.S.P., Fermentation and Edible grades.

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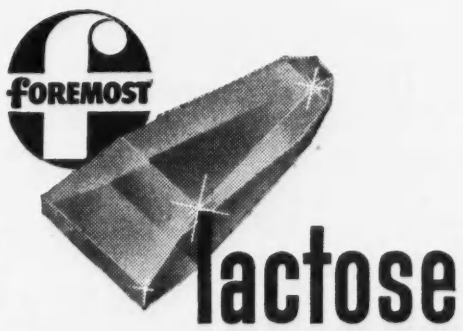


WESTERN CONDENSING COMPANY

Appleton, Wisconsin

A WORLD-WIDE SUPPLIER OF HIGH-QUALITY MILK DERIVATIVES

Distributed by **McKESSON & ROBBINS, Inc.** Chemical Department
and their West Coast Subsidiary, **MEFFORD CHEMICAL COMPANY**

Methyl bromide, jobbers, cyls., various sizes, frt. alld. E.	lb.	.47	.61
Cellulose, special vis. (1,500-4,000 ops.), 50 lb. bgs, c.l., works	lb.	.78	—
2,000-lb. lots and more, same basis	lb.	.65	—
smaller lots, frt. alld. on 100 lbs.	lb.	.89	1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld.	lb.	.60	—
2,000-lb. lots and more, same basis	lb.	.72	—
smaller lots, frt. alld. on 100 lbs	lb.	.75	.85
Chloride, indust., cyls., frt. equald.	lb.	.22	—
tanks, multi-unit, same basis.	lb.	.15¾	—
single unit, same basis	lb.	.12	—
refrigerator mfrs., cyls., dlvd. other consumers or service men, cyls., dlvd	lb.	.46	.48
Chloroform (see 1,1,1,-trichloroethane).	lb.	.67	—
Cinnamate, cns	lb.	1.53	1.80
Cyclohexanol, dms., c.l., works	lb.	.35½	—
l.c.l., works	lb.	.36	—
tanks, works	lb.	.34	—
Ethyl ketone, dms., c.l., dlvd.	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
Methyl formate, refd., dms.	lb.	.35	.40
tech., non-ret. dms., any quantity, works	lb	10	—
Heptin, carbonate, bots	lb.	31.00	42.00
p-Hydroxybenzoate, fib. dms.	lb.	1.90	2.00
Ionone, standard, cns., dms.	lb.	5.00	5.25
Isobutyl carbinol, dms., c.l., dlvd.	lb.	.16½	—
l.c.l., dlvd	lb.	.17½	—
tanks, dlvd	lb.	.14	—
ketone, dms., c.l., dlvd	lb.	.16½	—
l.c.l., dlvd	lb.	.17½	—
tanks, dlvd	lb.	.14	—
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va	lb.	.31	—
smaller lots, same basis	lb.	.31½	—
tanks, same basis	lb.	.29	—
Naphthyl ketone, cryst., cns	lb.	3.00	4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)			
Roseaniline chloride, NF, fib. dms., 5-lb. dms.	lb.	6.54	—
Salicylate, USP cns., 500-lb lots	lb.	.59	—
Testosterone, USP, 100-gram bots.	gram	.68	—
2-Methylbenzylamine, dms., l.c.l. works	lb.	1.25	—
2-Methylbenzyl dimethylamine, dms., c.l., works	lb.	1.89	—
l.c.l., works	lb.	1.90	—
2-Methyl-5-ethyl pyridine, dms., c.l., works	lb.	.445	—
l.c.l., works	lb.	.45	—
tanks, works	lb.	.43	—
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted	lb.	3.25	—
Chloride, tech., dms., c.l., dlvd. E.	lb.	.13¼	—
l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.11¼	—
b-Methylnaphthalene, 32°C. m.p., dms., works	lb.	.90	—
Methylpentanediol (see Hexylene glycol).			
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).			
Methylthionine chloride (see Methylene blue).			
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works	lb.	.04	—
roofing, 20 to 80 mesh, works	lb.	.03	—
wet-grd., biotite, bgs., c.l., works, frt alld. E	lb.	.06½	—
l.c.l., ex-whse	lb.	.07¼	—
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E	lb.	.08¼	—
l.c.l. ex-whse or frt. alld. E	lb.	.09	—
rubber bgs. c.l. works, frt. alld. E	lb.	.08	—
l.c.l. ex-whse or frt. alld. E	lb.	.08¾	—
wallpaper, bgs., c.l., works, frt. alld. E	lb.	.08¾	—
l.c.l., ex-whse or frt. alld. E	lb.	.09	—
white, 5-10 microns, bgs., c.l., works, frt. alld. E	lb.	.08¼	—
l.c.l., ex-whse or frt. alld. E	lb.	.09	—
Mica, wet-grd. W. of Miss. ½c. higher; W of Rockies, 1c. higher.			
Mineral spirits (see Petroleum mineral spirits).			
Molasses, blackstrap feed grade, tanks, New Orleans	gal.	.27	.27½
New York	gal.	.29	—
Molybdenum (metal), powd., 80 or 200 mesh cns works	kilo.	7.84	—
325 mesh cns works	kilo	9.13	—
Trioxide, pure, dms., works	lb.	1.15	—
tech. dms. works, basis Mo. content	lb.	1.39	—
Monobutylamine, dms., c.l., E. of Rockies	lb.	.55½	—
l.c.l., same basis	lb.	.56½	—
tanks, same basis	lb	.53	—
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E	lb.	.10	—
l.c.l. same basis	lb.	.11	—
tanks, same basis	lb.	.08½	—
Monoethanolamine dms., c.l., dlvd. E	lb.	.27½	—
l.c.l. same basis	lb.	.28½	—
tanks, same basis	lb.	.25	—
Monoethylalphanapnthylamine (see N-Ethyl-a-naphthylamine)			
Monoethylamine 70% contained amine, dms., c.l., dlvd. E	lb.	.37½	—
l.c.l., dlvd E	lb.	.38½	—
tanks, dlvd E	lb.	.35	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).			
Monoisopropanolamine dms., c.l., dlvd. E	lb.	.27½	—
l.c.l., same basis	lb.	.28½	—
tanks, same basis	lb.	.25	—
Monoisopropylamine dms., c.l. dlvd.	lb.	.32½	—
l.c.l., same basis	lb.	.33½	—
tanks, same basis	lb.	.30	—
Monomethylamine, 30-35% soln., dms., c.l. frt equald 100% basis.	lb.	.40	—
l.c.l., frt. equald 100% basis.	lb.	.40½	—
tanks, frt. equald 100% basis.	lb.	.31	—
40% soln., dms., frt. equald., 100% basis	lb.	.37	—
l.c.l., frt equald. 100% basis.	lb.	.37½	—
tanks, frt equald. 100% basis.	lb.	.31	—
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).			
Glutamate, dms., c.l.	lb.	1.15	—
l.c.l.	lb.	1.23	1.27
Phosphate (see Sodium phosphate monobasic).			
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)			
Morphine cns	oz.	12.40	12.60
Acetate anhyd. cns	oz.	9.95	10.00
Hydrobromide, cns	oz.	9.90	9.95
Hydrochloride, NF cns	oz.	9.90	9.95
Sulfate USP cns	oz.	9.90	10.05
Morpholine, dms., c.l., dlvd E	lb.	.55¼	—
l.c.l., dlvd E	lb.	.56¼	—
tanks, dlvd E	lb.	.52¾	—
Musk, syn. ambrette, 100-lb. lots, fib. dms	lb.	4.45	5.15
25-lb. lots cns	lb.	5.05	5.65
5-lb. lots, cns	lb.	5.20	5.50
ketone, 100-lb. lots, fib. dms	lb.	4.70	5.30
25-lb lots cns	lb	5.35	—
5-lb. lots, cns	lb.	5.45	—
xylol, 100-lb lots, fib. dms	lb.	1.40	—
25-lb lots, cns	lb.	1.45	—
5-lb lots, cns	lb.	1.50	—
Mustard seed, Danish, yellow, bgs	lb.	.10½	—
Du ch, bgs.	lb.	.10½	—
English, yellow, bgs.	lb.	.11	—
Montana, oriental, bgs	lb.	.08½	Nom.
Yellow, bgs	lb.	.10½	—
Myrobalans, J-1, genuine, bgs., ex-dock	ton.	61.00	62.00
crushed, bgs. ex dock	ton	79.00	80.00
Bombay, bgs., ex dock	ton.	53.00	59.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty	lb.	.10	.10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.)			
Solvent (see S)			
Naphthalene crude, dom., 74°, tanks, frt. equald	lb.	.06¼	—
78° bgs., c.l., same basis	lb.	.07½	.08
l.c.l., same basis	lb.	.07¾	.08¼
tanks, same basis	lb.	.07	—
Imp., 73° bgs., large lots	lb.	.05	Nom.
refd., indust., chipped, crushed, bgs., frt. alld.	lb.	.12½	—
tanks, same basis	lb.	.11¾	—
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis.	lb.	.15½	—
cs., 50 lbs., c.l., same basis	lb.	.15¾	—
1-lb. pkgs., c.l., same basis.	lb.	.18½	—
a-Naphthol, bbls., frt. alld	lb.	1.00	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.33	—
l.c.l., works	lb.	.35	—
a-Naphthylamine, bbls., frt. alld	lb	.50	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60	—
Neocinchophen USP dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity	gram.	.45	—
100-999 gram lots, basis, activity.	gram.	.55	—
Nerolin, cns	lb.	2.45	2.65
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd	lb.	.73	.80
Carbonate, bbls., dlvd	lb.	.80¾	.87¾
Chloride, bbls., dlvd	lb.	.40½	.48½
Formate, bbls., ton lots, frt. alld	lb.	.72	.73
Metal, electro cathodes, cs., works	lb.	.74	—
Nitrate, bbls., works	lb.	.32½	.33½
Oxide, black, bbls	lb.	.84	—
green, bbls	lb.	.85	—
Sulfate, bgs., c.l., dlvd	lb.	.32½	—
l.c.l., dlvd	lb.	.33½	.40½
Nicotinamide, USP, dms., frt. adjusted	kilo.	12.00	12.30
Hydrochloride, dms., frt. adjusted.	kilo.	11.50	11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld	lb.	1.20	—
manufacturers, 500-lb. dms., frt. alld.	lb.	1.05	—
Niger seed, bgs	lb.	.12	.12½
Nikethamide, cbys	lb.	7.50	—
m-Nitroaniline, cryst., dms., frt. alld.	lb.	1.18	—
paste, dms., frt. alld., 100% basis.	lb.	1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld.	lb.	.49	—
l.t.l., frt. alld.	lb.	.51	—
p-Nitroaniline, dms., frt. alld.	lb.	.445	—
Nitrobenzene, dbl. dist., dms., c.l., frt. alld.	lb.	.14	—
l.c.l., frt. alld.	lb.	.15	—
tanks, frt. alld.	lb.	.12	—
Nitrocellulose, ester soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 20-40, 60-80, 125-175, secs., bbls., c.l., works	lb.	.34	—
l.c.l., same basis	lb.	.35	.37
18-22 cps. bbls., c.l., same basis	lb.	.36	—
l.c.l., same basis	lb.	.37	.39
250-400, 600-1,000 secs., bbls., c.l., same basis	lb.	.39	—
l.c.l., same basis	lb.	.40	.42

This Label Is Your ASSURANCE of FIRST GRADE, HIGHEST QUALITY LEMON OIL

because...

- The M.C.P. label is that of one of the nation's oldest specialists in quality citrus products — pectins, juices, concentrates, etc.
- It's the *producer's* label — which means that M.C.P. LEMON OIL is pure and unadulterated...cold-pressed in California and *packed by the producer* ... to assure the user receiving it pure and unadulterated.
- It identifies M.C.P. LEMON OIL as one that meets all the long-accepted standards for highest quality and finest flavor.
- There is but one M.C.P. LEMON OIL label, and this is what it means:—*An exclusively first grade lemon oil, for M.C.P. packs but this one top grade!*

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

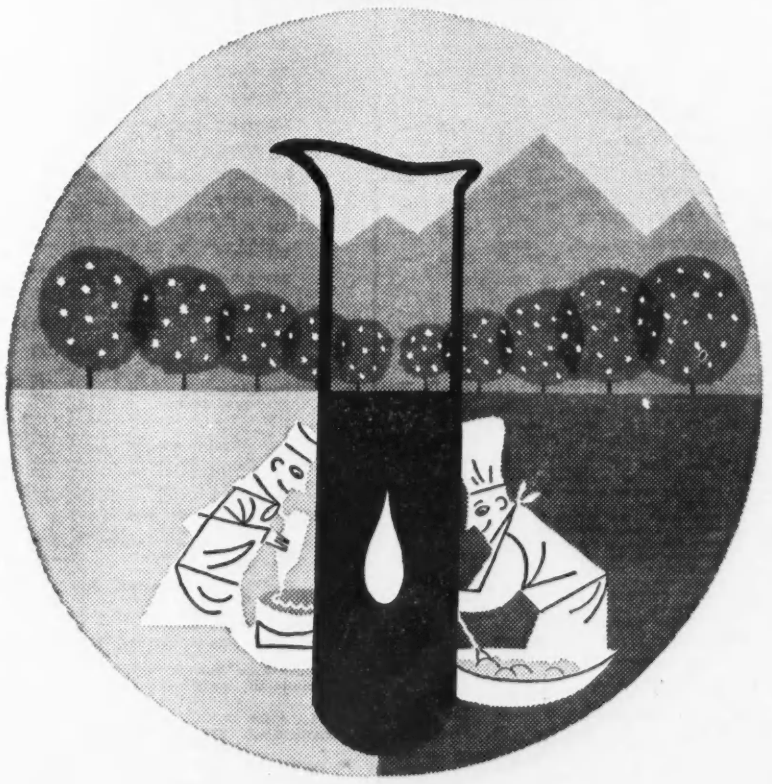
Nitrocellulose, spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
i.c.l., same basis lb .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
i.c.l., same basis lb .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
i.c.l. same basis lb .16 - —
tanks, same basis lb .13 - —
p-Nitrochlorobenzene, dms lb .26 .27
2-Nitro-4-chlorophenol, dms lb .75 —
N-ethoethane, dms., c.l. dlvd. E lb .24 —
i.c.l. dlvd E lb .24¾ - —
tanks, dlvd E lb .22½ - —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks frt. equald. unit. 1.14 - —
Nitrogenous process tankage, bulk, works unit-ton 3.00 4.00
Sewage sludge, bulk works, unit-ton 2.95+ .50
Nitromethane, dms., c.l. dlvd. E lb. .24 - —
i.c.l. dlvd E lb .24¾ - —
tanks dlvd E lb .22½ - —
Nitromethane prices West of Rockies are 1c higher.
α-Nitronaphthalene, bbls. frt alld. lb. .41 - —
Nitropropane-1 and 2, dms., c.l., dlvd E lb. .22½ - —
i.c.l. dlvd E lb. .23¼ - —
tanks, dlvd E lb. .21 - —
Nitropropane prices West of Rockies are 1c higher
o-Nitrophenol, dms. works, frt. equald lb. .94 - —
p-Nitrophenol, dms., frt. alld. c.l. lb. .51 - —
i.c.l., lb. .53 - —
o-Nitrotoluene, dms. c.l., frt. alld. lb. .10 - —
i.c.l. frt alld lb. .11 - —
tanks frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether cone. bots 100-lb. lots lb. 1.28 - 1.33
Nonyl phenol, dms. c.l. frt. alld. lb. .26½ - —
i.c.l. frt. alld lb. .27½ - —
tanks, frt. alld lb .24½ - —
Nutgalls, Aleppo, bgs lb. .36 .38
Chinese, bgs. lb No prices.
Nutmeg, East Indian, bgs lb. 2.80 - —
West Indian, bgs lb. 2.80 - —
Nux vomica, bls lb. .10 - .12
powd., bbls., bxs lb. .15 - .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾ - —
Borger, Tex gal. .15¾ - —
l-Octanol, tech. dms., c.l., dlvd. lb. .35 - —
i.c.l. dlvd lb. .37 - —
tanks, dlvd lb. .32½ - —
Octyl phenol, bgs., c.l., works lb. .24 - —
i.c.l., works lb. .24½ - —
tanks, works lb. .23 - —
Drum prices for octyl phenol are 11c higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns. lb. 4.25 - 5.00
Almond, artif. bitter (see Benzaldehyde).
nat., bitter, F.F.A. bots lb 3.00 3.75
NF, bots. lb 3.25 3.75
sweet, USP, cns., dms. lb. 1.40 - 1.45
Allspice (see Oil, pimento).
Amyris, dms. lb 1.25 —
Angelica root, bots lb. 85.00 -100.00
seed, bots lb. 80.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 2.75 - 3.50
Apricot, kernel, USP, dms lb. .75 - .90
Avocado, cns lb. 3.25 - —
Bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian, 50-55%, cns., dms., lb. 1.85 2.40
Bergamot, nat., NF, Italian, cns. lb. 10.25 -10.50
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, cns. lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.50 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 3.30
redist., USP, cns lb. 2.25 3.40
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms lb. .28 - .35
white, dms lb. 29 - —
Cananga, native, cns lb. 6.50 - 6.75
rectified, cns lb. 10.00 -13.00
Caraway, NF, cns lb. 3.65 - 4.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots lb. 38.00 -40.50
Cassia, USP (see Oil, cinnamon, USP).
Castor, dom., blown, dms., c.l. lb. .2850- —
i.c.l. lb. .2950- —
dehydrated, bodied, dms., c.l. lb. .3010- —
i.c.l. lb. .3110- —
tanks lb. .2810- —
unbodied, dms., c.l. lb. .2860- —
i.c.l. lb. .2960- —
tanks lb. .2650- —
hydrogenated, bgs., ton lots lb. .3375- —
i.c.l., dlvd lb. .3575- —
No. 1, dms., c.l. lb. .2500- —
i.c.l. lb. .2600- —
tanks lb. .2300- —
No. 3, tech., dms., c.l. lb. .2325- —
i.c.l. lb. .2450- —
tanks lb. .2150- —
USP, dms., c.l. lb. .2650- —
i.c.l. lb. .2750- —
tanks lb. .2450- —
refined, deod., dms., c.l. lb. .2950- —
i.c.l. lb. .3050- —
imp., No. 1, Brazilian, tanks lb. .22 - .22¼
Sulfonated, 50%, dms., works lb. .15¼ - .15½
75%, dms., works lb. .20 - .20½
Cedarleaf, USP, XIII, cns., dms. lb. 3.75 - 4.25
Cedarwood, cns., dms lb. .65 - 1.00
Celery seed, bots. lb. 15.00 - —
Chamomile, blue, Hungarian, bots. lb. 225.00 - —
Chenopodium, NF, cns lb. 4.50 - 4.75
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb. 36.00 -70.00
leaf, crude, dms lb. 1.60 - 2.00
USP cns., dms. (Cassia) lb. 10.25 -10.90
Citronella, Ceylon, cns., dms. lb. .87 - .90
Java, cns lb 1.95 —
Java-type, cns lb. 1.50 - —
Clove, bud, USP, cns., dms lb. 2.65 - 2.85
leaf, crude, dms lb 1.20 1.50
Coconut, crude, tanks, N. Y. lb. .12 - —
Pac. coast lb. .11 - —
refd. Cochin type, dms. tax incl., lb. .19¼ - .19½
deodorized, tax incl., dms lb. .22¼ - .23¼
Cod, Newfoundland, dms lb. .11⅝ - .11⅞
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns. lb. 1.75 2.50
Coriander, USP, bots. lb. 10.50 - —
Corn, crude, tanks, works lb. .14½ - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06¼ - —
refd., salad, dms. lb. .2016- .2030
tanks lb. .1816- —
Costus, bots oz. 6.00 - —
Cottonseed, crude, tanks, South, East lb. .14¼ - —
Valley lb. .13⅞ - —
Texas, Lubbock lb. .13⅞ - —
Waco lb. .14⅛ - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms. lb. .19¾ - .19⅞
tanks lb. .17⅜ - —
Creosote (see Creosote, coaltar).
Cubeb, cns lb. 4.10 - 4.25
Cumin, bots., cns lb 4.75 - 5.00
Cypress, bots lb. 5.30 - —
Degras (see D).
Dillseed, bots lb. 2.80 4.25
Dillweed, dom., bots., dms lb. 3.25 - 4.25
Dip (see D)
Erigeron, cns lb. 5.50 - 7.50
Eucalyptus, NF, rect., 70-80% dms. lb .62 - —
80-90%, dms. lb 72 - —
Fennel, sweet, USP, cns lb. 2.85 - —
Fir, Canada, cns lb. 4.75 - —
Fish, refd., alkali, dms lb. .1450- .1500
kettle-bodied, dms lb. .1680- .1730
light-pressed, dms lb. .1300- .1350
tanks lb. .1150- —
Oil, fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram, dms. 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms. 1,000,000 units. .10½ - .11
100,000 A units per gram., dms 1,000,000 units. 14 - —
200,000 A units per gram., dms. 1,000,000 units. .15¼ - —
500,000 A units per gram., dms 1,000,000 units. .16 - —
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fusel (see F).
Garlic, pure, bots oz. 4.25 - 5.00
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns lb. 13.50 -14.50
Bourbon, cns lb. 15.00 - —
Turkish (see Oil palmarosa)
Ginger, dist., bots lb. 24.00 - —
Grapefruit, dms lb. 1.60 - —
Grease No. 1, dms., c.l. lb .15¼ - —
i.c.l. lb. .16¼ - .18¼
extra, winter, strained dms. c.l. lb. .17¼ - —
prime, burning, dms. c.l lb. .18¾ - —
i.c.l. lb. .19¾ - 21¼
Guaiacwood, cns. lb. 1.60 - —
Hemlock, cns lb. 2.10 - 2.30
Oil, juniper berry, bots. lb. 2.75 - 4.00
lb. 2.75 4.00
twice rectified, bots lb. 3.60 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns lb. .38 .55
Lard (see Oil, grease).
Laurel leaf, dms., cns lb 9.75 12.50
Lavandin, dms., cns lb. 2.35 2.95
Lavender, flower, USP, French, 35-37% ester, cns lb. 5.50 - —
38-40% ester, cns lb. 7.50 - —
40-42% ester, cns lb. 9.00 - —
spike, Spanish, cns lb. 2.60 - —
Lemon, USP, Calif., cns., dms lb 4.25 5.00
Messina, cns lb 5.75 —
terpeneless, bots lb. 50.00 -85.00
Lemongrass, cns., dms lb. 1.65 —
Lime, dist., Mexican, cns lb. 5.00 - 5.25
West Indian, cns lb. 5.00 - —
expressed, West Indian, cns lb 6.00 8.00
terpeneless, bots lb. 30.00 85.00
Lignaloe wood, Mex., cns lb. 4.65 - 5.00
Linseed, raw, dms., c.l., N. Y. lb. .1670- —
i.c.l. lb. .1770- .1870
tanks, f.o.b. Minneapolis lb. .1340- —
New York lb. .1480- —
tankwagon, New York lb. .1510- .1520
Boiled linseed oil 006c per lb higher
Mace, dist., cns., dms. lb. 14.00 - —
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic & Gulf lb. .09½ Nom.
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .17½ Nom.
syn., bots lb. 1.60 1.85



OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers

Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Oil, neatsfoot, 15° cold test, dms. lb. .30 - .33
20° cold test, dms. lb. .29 .32
30° cold test, dms. lb. .28 .31
Neroli, NF, French bots lb 575.00 —
Nutmeg, USP, dist., East Indian, cns., dms. lb. 15.00 - —
West Indian, cns., dms. lb. 14.50 - —
Ocotea cymbarum, dms. lb. .55 - —
Oiticica, liq., dms. lb. .17½- .17¾
tanks lb. .16 - .16¼
Oleo, extra, dms. lb. .19 - .19½
Olibanum, bots lb 5.50 7.65
extra fine, bots lb 8.00 9.00
Olive, edible, Spanish, dms., duty-paid gal. 3.50 - 3.60
Orange, sweet, dist., cns., dms lb. .45 - .80
expressed, USP, Brazilian, cns., dms. lb. No stocks.
Calif., cns., dms lb. .75 - —
Florida, cns., dms lb. .55 - —
Messina, cns lb 3.85 - 5.85
West Indian, cns., dms. lb 2.50 - 3.65
sesquiterpeneless, bots. lb 65.00 120.00
Origanum, Spanish, cns lb 2.00 —
Palm, clarif., dms. lb. .15½- .16½
Palmarosa, cns. lb. 6.75 - —
Paraffin, pale, 100-110 vis., at 100°F, tanks, East Coast refy gal 14 —
Patchouli, dms lb. 6.00 - —
Peach kernel, USP (see Oil apricot kernel)
Peanut, crude, tanks, f.o.b. mills lb. .15½- —
refd., dms lb. .21¼- .21½
tanks lb. .19¼- —
Pennyroyal, USP, imported, cns. lb 2.75 3.50
Peppermint, nat., dms lb 4.75 6.50
redist., USP, dms lb 5.25 6.75
Persic, USP (see Oil apricot kernel)
Petitgrain South American cns. dms. 3.00 - —
Pimento, berry, NF, dms. lb. 5.50 - —
leaf, cns. lb 2.05 2.60
Pine, dest.-dist., dms., l.c.l., works. lb. .12¼- —
ex whse lb. .14¼- —
steam-dist., dms., ex whse, N.Y.C lb. .176 - —
dlvd. lb. .179 - —
Pineneedle Siberian (see Oil, abies siberica)
Rapeseed, tankcars lb. .18¾- —
Red (see Acid, oleic).
Rice bran, clarif., dms., l.c.l lb. .18 Nom
tanks, dlvd, E lb 15 .15½
Rose, nat., Bulgarian, bots oz. 70.00 - —
Rosemary, Spanish, NF, cns., dms. lb. .70 - 1.00
tech., cns., dms lb .50 70
Rue, bots lb 2.00 2.50
Safflower, dms., N. Y. lb. .1785- .1835
tanks, same basis lb .1585- —
Sage, clary, bots lb. 18.75 19.00
Dalmatian, cns. lb. 4.75 - —
Spanish, cns lb 1.20 1.45
Sandalwood, cns. lb. 17.00 - —
Sardine, crude (tanks, Pac. coast) lb. .08½- .08¾
Sassafras, artif., dms. lb. .50 - .62
nat., dom., dms. lb. 1.45 - 2.10
imp., Brazilian (see Oil, ocotea cymbarum).
Savin, cns lb 2.75 —
Savory, cns lb 4.25 —
Sesame, USP, dms lb. .38 - .39
Shingle stain, tar distillate, dms., c.l., works gal. .35 —
l.c.l. works gal 44 —
tanks, works gal. 23 —
Snakeroot, Canada, cns. lb. No stocks.
Soybean, crude, tanks, Decatur lb. .13⅞- —
foots, soapstock, acid 95% tanks, N. Y. lb. .06¾- —
refd., alkali, dms. lb. .1879- .1900
tanks lb. .1679- —
clarified, dms. lb. .1829- .1850
tanks lb. .1629- —
salad, dms. lb. .1909- .1925
tanks lb. .1709- —
Spearmint, dms lb. 4.25 - —
Sperm, bleached winter, 45°, dms. lb. .1675- .1725
tanks lb. .1500- —
nat. winter 45° dms lb. .1575- .1625
tanks lb .1400- —
Spruce, cns., dms. lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb 4.25 9.50
Southern, cns lb 2.30 2.75
Tall, crude, dms., c.l., works lb. .04¼- —
tanks, works lb. .02½- .03
dist., dms., c.l., works lb. .07¾- —
l.c.l., works lb. .08 - .08½
tanks, works lb. .03¼- —
refd., dms., c.l., works lb. .06¾- —
l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tallow, acidless, dms., c.l. lb. .13½ —
l.c.l. lb 14½ 16
Tangerine, Floridian, dms lb 2.00 3.80
Tansy, dms lb. 7.50 8.40
Tar acid (see T's).
Pine, comi, dms., c.l., works lb 0561 —
l.c.l., works lb 0634- —
whse lb 0745- —
tanks, works lb 046 —
rectified, NF, dms., incl., l.c.l., works, South gal 1.05 - —
ex whse, N Y C gal. 1.15 - —
refd., dms., incl., l.c.l., works, gal. .92 - —
ex-whse, N.Y.C. gal. 1.02 - —
Theobromine (see Cocoa butter).
Thyme, NF, red., cns., dms. lb 1.45 - 1.75
white, cns. lb 1.70 2.00
tech., white, cns lb .40 1.85
Tung, dms., c.l., N. Y. lb. .24 - —
l.c.l., same basis lb. .24½- .25
tanks, N. Y. lb. .22½- —
domestic mills lb. .23 Nom.
Turpentine, NF, cns., dms. lb. .28 - .45
Veviter, Bourbon, cns lb 11.75 -11.90
Haitian, cns. lb 9.25 -10.00
Java, cns lb 18.50 -20.00
Wheat germ, 5-gal. dms gal. 11.25 - —
Turkey red (see Oil, castor, sulfonated).
White mineral, tech., 50-65 vis., non-ret. dms., c.l., t.o.b. N Y gal. .55 - —
65-75 vis. non-ret. dms. c.l., same basis gal. .56 - —
l.c.l., same basis gal. .61 - —
85-90 vis., non-ret., dms., c.l., same basis gal. .57 - —
l.c.l., same basis gal. .62 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .63 - —
l.c.l., same basis gal. .68 - —
145-155 vis. non-ret. dms., c.l., same basis gal 69½- —
l.c.l., same basis gal. 74½- —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. 71 - —
l.c.l., same basis gal. 76 - —
200-210 vs., non-ret dms. c.l., same basis gal. 75 - —
l.c.l., same basis gal. 79 - —
345-355 vis. non-ret. dms., c.l., same basis gal. 78½ —
l.c.l., same basis gal. 84½ —

Oil, wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 4.50 - 7.50
syn (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Oil, chenopolium, NF).
Wormwood, cns. lb. 5.50 - —
Ylang-ylang, Bourbon, bots lb. 14.00 -16.00
extra, bots lb. 28.00 -40.00
Madagascar, bots lb. No stocks
Oleostearine, dms lb. 14½- .15
Opium USP, cns oz. 19.20 19.45
gran., USP, cns oz. 21.65 -21.90
powd USP cns oz. 21.65 -21.90
Orange cadmium-selenide lithopone, light shade bbls., frt. alld E. of Rockies lb 1.80 - —
deep shade bbls lb. 2.00 - —
Cadmium-mercury lithopone, deep shade bbls lb. 1.78 - —
Chrome CP, bbls., dlvd. N of Tennessee and N.C., E of Miss. R., include Davenport, Tenn., and E of Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —
Chrome orange prices are ½c. higher dlvd Ala., Fla., Ga., La (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner, CP. lb. 1.50 - —
Mineral, American, bbls., l.c.l., works lb. 2235- —
Molybdated, bbls lb. .48 - —
o-Nitroaniline toner, kegs lb. 1.35 - —
Orange peel, bitter, Haitian, bls lb. 14 - .16
sweet, bls lb. 16 - .18
Orris root, Florentine, bls. lb. .55 - —
powd., bbls., bxs lb. .68 - —
Verona, bls. lb. .35 - .40
powd., bbls., bxs lb. 45 - —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthocylorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol)
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine)
Osage orange cryst., No. 1, bbls. l.c.l. lb. 40 - —
extract liq. No. 1, bbls., l.c.l., lb. 19 - —
Ouabain, USP, bots gram. 3.00 4.00
Oxyquinolin sulfate, cns. 100-lb. lots, works lb 4.75 5.00
smaller lots works lb. 4.92 5.17

P

Papain, USP, African, bots lb 3.50 4.00
Ceylon lb 3.00 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots oz. 5.00 —
smaller lots oz. 5.05 5.20
Sulfate, cns. oz 7.10 7.35
Paprika, Roumanian, bgs lb 26 —
Spanish, bgs lb 60 - —
Yugoslavian, bgs lb. 35 - —
Para-aminophenol (see p-Aminophenol)
Para-anisidin (see p-Anisidine)
Parachloro ortnonitroanilin (see 4-Chloro-2 nitro
Parachloranilin (see p-Chloraniline)
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol)
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F., ASTM, tanks, refy lb. .0815- —
125°-127°F., ASTM, tanks, refy lb. .0815- —
130°-132°F., ASTM, tanks, refy lb. .0815- —
132°-134°F., ASTM, tanks, refy lb. .0815- —
135°-137°F., ASTM, tanks, refy lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraformaldehyde 91% flake, bgs., c.l. frt. alld lb. .11¼- —
l.c.l., frt. alld lb. .13¼- .14¼
powd., bgs., c.l., ex whse lb. .167 - —
l.c.l., ex whse lb. .182 - —
USP, X, fib dms., c.l. lb. .19 - —
1,000-lb. lots lb. .20 - —
smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld lb. .50 .53
tech., dms., c.l., t.l., works lb 1.3395- —
l.c.l., works lb 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide)
Paris green, dealer, dms., c.l., frt. alld lb. .44 - .47
l.c.l., same basis lb. .45 - .48
Passion flower, herb, bls. lb. .25 - —
Peanut meal, 45%, old process, hgs., mills ton. 51.50 - —
Pectin, citrus, NF, powd., bbls lb 2.05 2.06
tech., powd., bbls. lb 1.25 —
imported, Danish, ex whse lb 1.28 —
Penicillin, crystalline, potassium, bulk 1,000,000 units. .0675- .0700
Procaine, bulk 1,000,000 units. .0675- .0700
Sodium, bulk 1,000,000 units. .0775- .0800

Pentachlorophenol, dms., c.l., t.l., works, frt. equald. lb. .22 - —
l.c.l., same basis lb. .23½- .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks., Tex. refy. gal. .13 - —
Pepper, black, Malabar, spot, bgs. lb. .28½- —
red, Gondar, spot, bgs. lb. No prices.
Japanese, hontaka bgs. lb. .34 - —
birdseyes, bgs., new crop lb. No prices.
Mombasa, bgs., shipt. lb. .56 - .57
Nigerian, bgs. lb. .42 - —
Turkish, bgs. lb. .28 - —
white, bgs. lb. .35 - .36
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls lb. .85 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 - —
l.c.l., dlvd. lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd. lb. .11½- —
Peru balsam, dms lb. 1.35 - —
Petrolatum, extra amber, dms., c.l., refy lb. .06½- —
l.c.l., dlvd lb. .08¼- —
tanks, refy. lb. .04¼- —
cream, dms., c.l., refy lb. .07½- —
l.c.l., dlvd. lb. .09¾- —
tanks, refy. lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07⅞- —
l.c.l., dlvd lb. .10⅛- —
tanks, refy. lb. .05⅜- —
snow, dms., c.l., refy lb. .08⅜- —
l.c.l., dlvd lb. .10⅜- —
tanks, refy lb. .06⅛- —
yellow, soft, dms., c.l., refy. lb. .06½- —
l.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
Petroleum, lacquer diluent, 150°-240°F, b.r., tanks, West Coast, ex tax, Los Angeles. gal. .174 - —
East coast, N. J., N. Y. gal. .20 - —
Mineral spirits, reg., tanks, Calif., ex tax San Francisco gal. .169 - —
East coast, N.J., N.Y. gal. .18 - —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —
odorless, tanks, refy., Watson, cal. gal. .25 - —
Borger, Tex. gal. .25 - —
Houston, Tex. gal. .25 - —
Philadelphia gal. .32 - —
N. J., dlvd. gal. .3328- —
N. Y., dlvd gal. .34½- —
Wood River, Ill gal. .2725- —
tankwagon, N. J., dlvd gal. .37½- —
N. Y., dlvd gal. .38½- —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .18 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles gal. .174 - —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
East Coast, N. J., and N. Y. gal. .19 - —
tankwagon Boston gal. .21½- —
gal. .21½- —
Chicago gal. .299 - —
Cleveland gal. .24½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21 - —
Pittsburgh gal. .20 - —
Solvent, partial aromatic, tanks, 203°-282°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r., 43°C. m.a.p., N. J gal. .26 - —
212°-284°F b.r., 19°C. m.a.p., N. J gal. .29 - —
224°-280°F., b.r., 48°C, m.p.a., Houston gal. .215 - —
273°-361°F., b.r., 29°C., m.a.p., N. J gal. .29 - —
282°-325°F o.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°-386°F., b.r., 31°C., m.a.p., N J gal. .29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348° b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J gal. .33 - —
324°-349°F., 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F., b.r., 30°C., m.a.p., Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J. gal. .39 - —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
Rubber, tanks, Cal., ex tax, San Francisco gal. .178 - —
East Coast, N. J. N. Y. gal. .19 - —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .18 - —
Pennsylvania, western gal. .16 - —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l. works lb. .16 - —
l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., t.l., frt. alld. E lb. .91 - —
l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.00 - —
l.c.l., same basis lb. 1.03 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt. alld E. of Rockies lb. .17¾- .18
l.c.l. same basis lb. .18¼- .19
tanks, same basis lb. .16 - —

Phenol, 82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .18½- —
tanks, same basis lb. .15½- —
39°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .19¼- .19¼
l.c.l. same basis lb. .19¾- .20⅛
tanks, same basis lb. .17½- —
USP, syn., dms. c.l., t.l., frt. alld lb. .20 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .18 - —
Phenolphthalein, USP or yellow, bbls. dms. 2,000-lb. lots. lb. 1.15 - —
smaller lots lb. 1.17 - 1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs. same basis. lb. .43 - —
Phenyl acetate, dms. 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde soln., 50%, bots lb. 2.40 2.70
100% bots lb. 4.00 4.65
dl-Phenylalanine, dms., works lb. 27.00 -37.50
l-Phenyl-3-carnethoxy pyrazolone-5, 200-lb. fib. dms., dlvd. E lb. 3.45 - —
smaller dms., dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .40½- —
l.c.l. dlvd E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt. alld. lb. 95 - —
o-Phenylenediamine, comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 1.80
p-Phenylenediamine, refd., tech., dms., works lb. 1.42 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
l.c.l., same basis lb. .76½- —
Phenylethyl acetate, bots lb. 1.25 1.60
Phenylhydrazine base, CP, bots lb. 3.00 3.07
Hydrochloride, comi, kgs. works. lb. 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, dlvd. E lb. 1.80 - —
smaller lots, dlvd. E lb. 2.10 - —
Phenylethylphenyl acetate, bots lb. 4.15 - 4.35
o-Phenylphenol, dms. l.c.l. works. lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
l.c.l., works lb. .41½- —
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
C.P., bots., works lb. 17.75 - —
tech., fib. drums., works lb. 10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Florida, land pebble, run-of-mine, washed, dried underground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines, long-ton. 5.115 - —
70-68%, b.p.l., c.l., same basis, long-ton. 5.515 - —
72-70%, b.p.l., c.l., same basis, long-ton. 6.165 - —
75-74%, b.p.l., c.l., same basis, long-ton. 7.165 - —
77-76%, b.p.l., c.l., same basis, long-ton. 7.165 - —
The Florida prices (above) are based on fuel oil at $2.82 per bbl. and labor at $1.43. Recent oil advance currently absorbed.
Phosphorus, amorph. red, dms., t.l., works lb. .48 - —
smaller lots, works lb. .49 - .50
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l. works, frt. equald. lb. .21½- —
tanks works, frt. equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
l.c.l. works lb. .12½- —
Pentoxide, dms., c.l., works lb. .1395- .1450
l.c.l., works lb. .1695- .1750
Sesquisulfide, tins, cs., c.l., works. lb. .38 - —
l.c.l., works lb. .39 - .40
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½- —
Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline 5°C. dms. c.l., works. lb. .32½- —
l.c.l. works lb 33 - —
g-Picoline 98% dms., works lb. 2.00 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Nitrate, USP, bots, vials oz. 4.65 - 4.75
Pimento, Jamaican, bgs lb. .72 - —
Mexican, bgs lb. .36 - —
Pink root, bls lb 2.50 - —
Piperazine, crude, dms., c.l., works. lb. 3.00 - —
l.c.l., works lb. 3.05 - —
Hexahydrate, French Codex, bots. kilo. 8.00 - 8.50
Piperidine dist. dms. frt. equald. lb 2.60 2.70
Piperonyl butoxide, dms. dlvd. E. lb 4.50 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25
Pitch, coaltar, bulk, aluminum, works ton. 40.00 -42.00
carbon and industrial, works. ton. 40.00 - —
core, works ton. 36.50 - —
fiber, works ton. 44.00 - —
roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton. 39.00 - —
Cottonseed, raw, dms., works lb. .03 - .03¼
tanks, same basis lb. .02¾- —
Linseed, dms lb. .06 - .06¾
Marine, dms lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb 05 .05½
Tall, dms., c.l., works ton. 50.00 -70.00
tanks, works ton. 30.00 -40.00
Plaster of Paris (see Gypsum).
Platinum metal, works oz. 98.00 -101.00
Pleurisy root, bls lb 45 50
Podophyllum resin, NF, dms. lb 15.60 -16.10
Poke root, bls lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more. 1,000,000 units. .52 - —
25-50 billion units, 1,000,000 units. .54 - —
1-25 billion units, 1,000,000 units. .56 - —

Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 • —
10,000-20,000-lb. lots, works lb. .43 • —
smaller lots, works lb. .46 • .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 • —
10,000-20,000-lb. lots, works lb. .43 • —
smaller lots, works lb .46 • .48
Poppy seed, Argentine, bgs. lb. .24 • —
Dutch, bgs. lb. .28 • —
Iranian bgs. lb .14½- .15
Polish, bgs. lb. .27½- —
Turkish, bgs. lb. .24 • —
Potash, caustic reg. flake, 88-92% dms., c.l., works 100 lbs. 9.15 • —
l.c.l., works 100 lbs. 10.20 • —
liq., 45% basis dms., c.l., works 100 lbs. 4.25 • —
l.c.l. same basis 100 lbs 5.05 • —
tanks same basis 100 lbs 3.70 • —
solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 • —
l.c.l., works 100 lbs. 9.75 • —
Potassium acetate, NF, dms lb .31 • .38
Bicarbonate, USP gran., dms lb. .22 • —
powd., dms. lb. .24 • —
Bichromate, gran., bgs., c.l., l.c.l., works lb. .18 • —
l.c.l., works lb. .18½- .19¾
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd. bbls. 5,000 lbs., 1 ship't. lb. .40½- —
dms., c.l lb. .40 • —
smaller lots lb. .41 • .43
Imp., kgs lb. .32 • .35
Bromate dms. 1,000 lbs. or more. lb. .50 • —
25-200-lb lots lb. .52 • .62
Bromide, USP, gran., bbls., kgs. lb. .37 • .38
Carbonate, NF, gran., bbls., dms. lb. .20 • —
powd., bbls., dms lb. .21 • .22
tech., calcined, bbls., c.l., works. 100 lbs. 9.00 • —
l.c.l., same basis 100 lbs. 10.05 • —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 • —
l.c.l., works 100 lbs. 8.65 • —
Chlorate cryst. dms., c.l., works. lb. .11¼- —
l.c.l. works lb. .11½- .12½
powd., dms., c.l., works lb. .11¾- —
l.c.l., works lb. .12 • .13
NF, gran., 25-lb. metal dms. lb. .36 • —
Chloride, agricultural, (see Potassium muriate).
Indust. 99.9% KCl, bulk, c.l., works ton. 29.00 • —
bgs., c.l., works ton. 33.50 • —
99.3% KCl, bulk, c.l., works. ton. 27.00 • —
bgs., c.l., works ton. 31.50 • —
USP, cryst., dms. lb. .21 • .23
gran., dms lb. .15 • .17
powd., dms lb. .24 • .26
Chromate, tech., bgs. lb. .50 • .50½
Citrate, USP, gran., dms. lb. .43 • —
powd., dms lb. .40½- .41½
Cyanide dms., 20,000-lb. lots or more works lb. .45 • —
2,000-19,999-lb lots, works lb. .455 • —
smaller lots, works lb. .465 • —
Dichromate (see Potassium bichromate).
Ferricyanide, dms., ton lots, works. lb. .50 • —
smaller lots, works lb. .65 • —
Ferrocyanide, bgs., ton lots lb. .23 • —
smaller lots lb. .23½- —
Fluoborate 6b dms., c.l., works lb. .30 • —
l.c.l. works lb. .31 • —
Fluoride, dms., works lb. .37 • .38
Gluconate, dms lb. 1.62 • —
Guaiacolsulfonate, NF, dms lb. 2.10 • 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .33½- .38
Hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 • —
Iodide, dms lb 1.90 • 1.95
Manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 • .1765
Metabisulfite, gran., dms lb. .20 • .21
powd., dms lb. .25 • —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 • —
July forward unit-ton. .38 • —
granular, 60-63% K_2O, bgs., c.l., works, base price ton. 26.25 • —
July forward ton. 27.45 • —
Nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 16.50 • —
smaller lots 100 lbs. 17.50 -18.00
gran., bgs., 20-ton lots 100 lbs. 9.25 • —
smaller lots 100 lbs. 10.50 -11.00
powd., bgs., 20-ton lots 100 lbs. 10.25 • —
smaller lots 100 lbs. 11.50 -12.00
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 • .31
Pentaborate, gran., bgs., c.l., works. ton. 191.50 • —
dms., ton lots ex whse. ton. 302.00 • —
smaller lots ex whse. ton. 307.00 • —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate dms., c.l., works lb. .18½- —
l.c.l., works lb. .19 • .20
Permanganate coml. kgs., works. lb. .26 • .29
USP, dms., works lb. .29¼- .31
Persulfate, bbls., c.l. works lb. .16½- —
dms., 5-ton lots, works lb. .18 • —
1-ton lots works lb. .20 • —
Pyrophosphate tetrabasic, dms., works lb. .15½- .18½
Prussiate red (see Potassium Ferrocyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l., works. 100 lbs. 17.00 -17.30
l.c.l. works 100 lbs. 17.80 • —
soln., clarif. 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 • —
l.c.l. 5 dms. or more works 100-lbs 6.55 6.95
tanks, works 100-lbs 5.45 • —
electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 • —
l.c.l., 5 dms. or more, works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 • —
40.5° Be 1:2.1, dms., c.l., works 100 lbs. 6.45 • —
l.c.l. 5 dms. or more works 100 lbs 7.20 7.60
tanks, works 100 lbs. 6.10 • —
Silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums 0.4c per lb higher
Stannate, dms., frt. alld. E lb. .769 • .861
Sulfate, agricultural, 50% K_2O, bulk, works, base price. unit-ton. .64 • —
July forward unit-ton 67 • —
NF VII, cryst. dms lb 31 .33
gran., dms lb 18½ —
powd., dms. lb. .16 • .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms., works lb. .84 • .94
tech., dms., works lb. .77 • .79
Titanate, ctns., c.l., works lb. .16¼- —
5-ton lots, works lb. .16½- —
1-ton lot or less, works lb. .16¾- —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 • —
l.c.l., works lb. .46 • —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton 13.45 • —
July forward ton. 14.00 • —
Potassium-sodium tartrate, NF, gran. powd., dms., c.l lb. .42½- —
5,000-lb. lots lb. .42 • —
smaller lots lb. .43½- .49
Potassium-titanium fluoride, fib. dms., works lb .39 .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 • —
l.c.l., works lb .52½- .55
Pregnenolone, bots. gram .45 • —
Acetate, bots. gram .40 • —
Procaine hydrochloride, USP dms., 1,000-lb. lots, frt. alld. lb 2.83 • —
100-500-lb. lots lb 2.95 3.15
Progesterone, USP bots., 100 gram lots gram .50 • —
Acetate, bots. gram .70 • —
Propane, indust., tanks, group 3 gal. .05 • —
N. Y. Harbor gal. .093 • —
n-Propyl acetate, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd lb. .15¼- —
tanks, dlvd lb. .11¾- —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 4.40
p-Hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo. 55.00 —
smaller lots kilo. 55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd E lb. .0845- —
l.c.l., same basis lb. .0950- —
tanks same basis lb .07 —
Propylene dichloride prices in West 1c higher dlvd. on same basis.
Glycol, indust., dms., c.l., dlvd. E. lb. .16 • —
l.c.l. same basis lb .17 • —
tanks, same basis lb .13½ • —
USP, dms., c.l., dlvd E lb. .18 • —
l.c.l., same basis lb .19 • —
tanks, same basis lb .15½ • —
Methyl ether dms., c.l., dlvd lb. .20 • —
l.c.l. same basis lb .21 • —
tanks, same basis lb .18½- —
Oxide, dms., c.l., dlvd. E lb. .18 • —
l.c.l., dlvd. E lb. .19 • —
tanks, dlvd E lb. .16½- —
Psyllium seed, black, bgs lb. .28 • .30
blonde, bgs lb .18 • —
husks, bgs lb .40 • —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3 bgs. ton lots lb .03⅝ .04¼
smaller lots lb .03⅞ .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ —
fine, bgs. ton lots lb .04 —
sun dried, coarse, bgs. ton. 58.00 • —
fine, bgs ton. No Prices
Pumpkin seed, bgs lb .25 .26
Pyrethrin, syn. (see Allethrin).
Pyrethrum flowers fine grd., 0.9% pyrethrins, bbls., works lb .45 • —
powd., 1.3% pyrethrins, obls., works lb .65 • —
liq. 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 • 8.85
100:1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 41.75 42.75
oleoresin dewaxed 20% dms., works lb 10.00 —
purif. 20% dms., works lb 10.00 10.10
Pyridine denaturing, dms., c.l., works and frt. equald gal 2.77 • —
l.c.l., same basis gal 2.80 • —
refd., 2° non ret. dms., l.c.l., same basis lb .75 • —
Pyridoxine hydrochloride, bots., 100-gram lots gram .37½- —
Pyrites, Canadian, 48-50% S, works, long-ton. 5.00 • 6.00
Pyrocatechol (see Catechol)
Pyrogallol, NF, 100 lb. dms lb. 3.50 • —
Pyroxylin scrap, ungrd., amber, dms., works lb .20 —
black, dms., works lb .12 —
mixed mottled, dms., works lb .13 —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china ivory, dms., works lb. .16 —
dense opaque dms., works, lb. .12 .15
translucent pastels cs., works. lb .14 —
colors, dms., works lb. .16 • —
USP bots lb 9.50 —

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Q

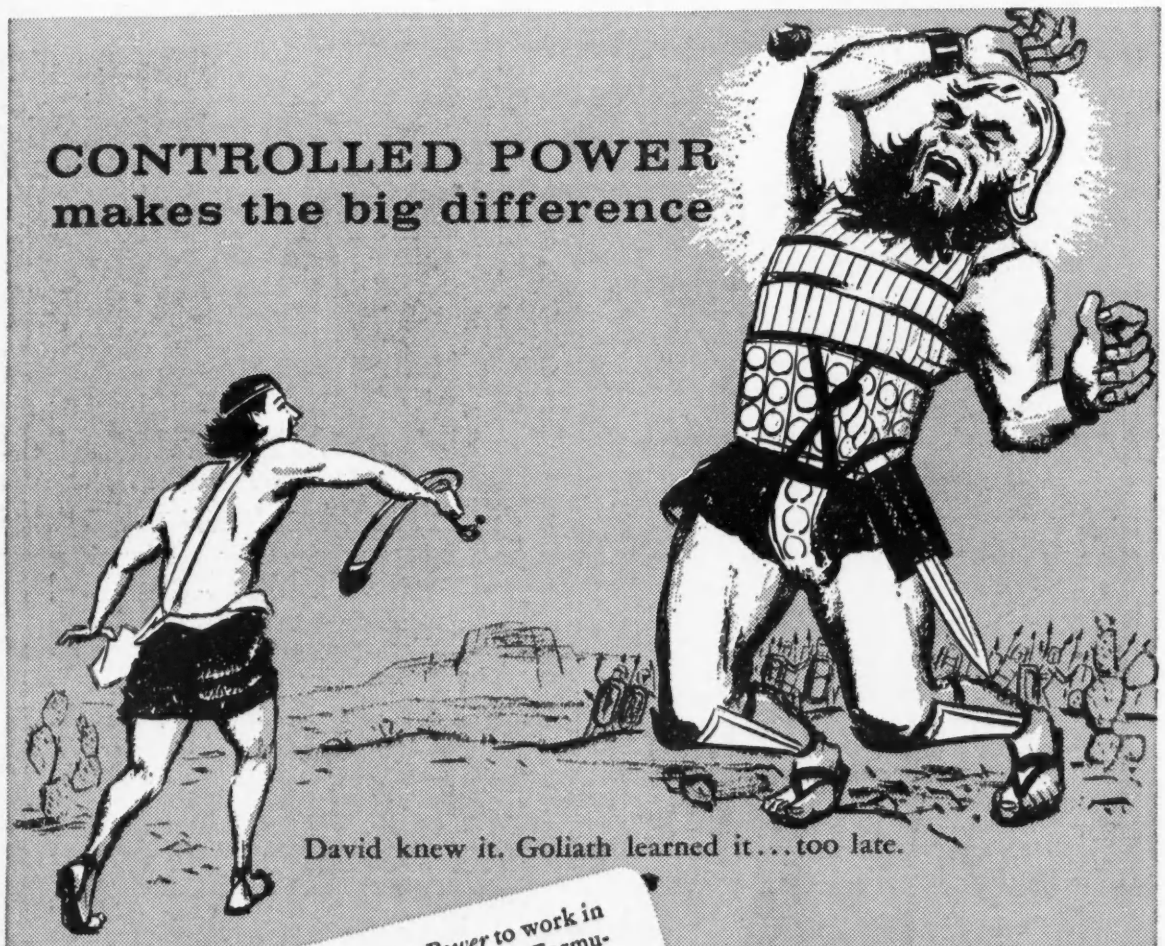
Quassia chips lb 17 —
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., works. lb. .16½- .17
liq., 35% tannin, bbls., works. lb. .08¼- .08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .11½- —
ord., 63% tannin, bgs., c.l., same basis lb. .1085- —
Quercitron extract cryst., No 1, bbls. l.c.l. lb 40 —
liq. No 1 bbls l.c.l lb 19 —
Quicksilver (see Mercury metal)
Quince seed bgs lb 2.00 Nom
Quinidine sulfate USP cns., 100-oz. lots oz. 73 .75
Quinine, NF, cns. 100-oz lots oz 54 —
Bisulfate USP cns. 100-oz lots. oz. 37½ —
Hydrochloride cns. 100-oz. lots. oz. .35 .47½
Sulfate USP, cns. 100-oz. lots oz. .29 .35
Quinoline dms. c.l. frt equald lb 50¾ —
l.c.l. same basis lb .51¼ —
tanks, same basis lb .50 —

R

R salt, paste, dms., frt. alld, 100% basis lb 88 - —
powd. frt alld. 100% basis lb 96 - —
Rauwolfia serpentina root, powd., bbls., dms lb 1.75 - —
Red, BON acid maroons, pure, bbls., lb 1.75 - —
resinated bbls lb 1.50 - —
arylid, deep shades, bbls lb. 3.70 - —
light shades, bbls lb. 2.85 - —
maroon, bbls lb. 3.70 - —
Cadmium CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade bbls. same basis lb 4.00 - —
medium shade, bbls., same basis lb 4.25 - —
medium light shade, bbls., same basis lb 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
orange red bbls. same basis lb 1.81 —
Selenide lithopone, maroon shade, bbls., same basis. lb. 3.77 - —
dark bbls., same basis. lb 3.90 - —
red shade, dark, bbls., same basis lb. 3.44 —
light bbls., same basis. lb 2.24 2.32
medium, bbls., same basis. lb 2.99 - —
medium light, bbls., same basis lb 2.49 - —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 - —
light shade, bbls., same basis lb 1.95 - —
medium shade, bbls., same basis lb 2.25 - —
medium light shade, bbls., same basis lb 2.10 —
Red, carmine, No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin toner, bbls., works lb. 1.75 - —
Indian, dom., pure, bgs., Bethlehem Easton, E St Louis, N Y lb. .12¾- —
Iron oxide, nat., 75-85% ferric oxide, bgs. t.c.l., Bethlehem Pa., Copley, O., Easton, Pa., bgs., c.l., works lb. .0675- —
Lake C toner, alizarine, bbls., works lb. 1.20 - —
Lithol toner, bbls., works lb. .93 - —
rubine toner pure bbls. works. lb. 1.50 - —
resinated, bbls., works lb 1.40 - —
Virginia type bbls., works lb. 1.40 - —
Maroon toner, MNPT kgs., c.l., works lb. 3.80 - —
Mercury oxide, tech. c.l., works. lb. 5.77 - —
Metallic, bbls., c.l., works lb. 02½- —
t.c.l., works lb 02¾- —
Naphthol, ITR, bbls., works lb. 5.50 - —
Oxide (see Red iron oxide)
Persian Gulf bgs., c.l., works. lb. .07¾- —
t.c.l. works lb 08 - —
Para toner bbls lb. 1.15 - —
chlorinated, kgs lb. 1.30 - —
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.80 - —
tungstated, PTMA works kegs lb. 6.60 - —
Spanish oxide, bbls., c.l., ex-dock. lb. .05¾- —
t.c.l., ex dock lb. .06 - —
ex whse., New York lb .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.70 - —
light shades, kgs. works lb. 1.70 - —
Turkey, bbls., works lb. .62 - —
Red, tuscan, bbls., frt. equald lb. .26 - .32
Venetian, jobbing, bgs., works. lb. .0475- —
lb. .0475- —
20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30% bgs., works lb. .06 —
35%, bgs., works lb. .0625- —
40%, bgs. works lb. 0675- —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red)
Red saunders NF powd. bbls lb. .35 .40
Reserpine, cryst., bots. gram. 3.00 - —
Resorcinol, tech. grade, dms., c.l., works, frt equald lb. 77½- —
t.c.l. same basis lb. 78½- —
USP, dms., works lb 2.75 —
powd., dms., works lb 2.95 —
Monoacetate NF dms lb 3.00 3.25
Rhatany root bgs lb 15 16
Rhodinol 5-lb cans lb. 32.00 -36.00
Rhubarb root, India, whole, bgs. lb. .30 - —
powd., bbls lb .38 - —
Riboflavin USP, bots., dlvd kilo. 65.00 - —
readily soluble, bots., dlvd kilo. 130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 125.00 - —
Rochelle salt (see Potassium-sodium tarfrate).
Roofing pitch (see Pitch, coaltar roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 —
resin 25-45% fib dms., works, unit-lb. .12 —
Rottenstone ngs. 5-ton lots, exwhse lb. .03¾- —
ton lots, same basis lb .04¼- —
Rutin, NF, fib. dms., 10 kilo lots. kilo. 17.00 - —
5 kilo lots kilo. 17.50 - —
1 kilo kilo. 18.50 - —
Ryania, 100% powd. bgs., c.l., works lb. .22 - —
t.c.l. same basis lb .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - .49½
activated, ground with lime, bbls. lb. .30 - .32
Saccharin USP cryst., soluble, dms., 1000-lb lots lb. 1.60 - —
smaller lots lb. 1.70 - 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 - —
smaller lots lb. 1.75 - 1.95
Calcium fib dms. 1,000-lb. lots, works lb 2.50 —
Saffron Spanish, USP, tins lb. 45.00 - —
Safrol, dms lb. .90 - 1.05
Sage, Cretan, bgs. lb. .11 - —
Dalmatian, bgs. lb. 44 —
Italian lb. 26 Nom.
Sago flour, raw, bgs. lb. .07 .07¼
refd., bgs lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.25 - —
Salol, NF, grnn., bbls., kgs lb 1.15 - —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.04 - —
table vacuum common, fine, paper bgs., c.l., 100 lbs. 1.29 - —
Saltcake dom bulk works, 100% Na2SO4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood East indies chips bgs. .65 - .66
powd., fib dms lb .75 - .76
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .93 - —
powd. bgs. frt. alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP bots oz. 13.50 -16.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. 30½- —
smaller lots lb. .31 .32
Selenium, powd., 99½%, dms., dlvd. lb. 12.00 - —
Senega root, bls lb. 2.75 - 3.00
Senna leaves, Alex. whole and half, bls lb. .19 —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No 2 bls. lb. .13 - .15
No. 3, bls lb. .11 - .13
powdered, bbls., bxs lb. .15 - —
pods, bls. lb. .14 - —
Serpentaria root, bls lb. 5.50 - —
Sesame seed, Egyptian, hulled, bgs. lb. .22½- —
nat., bgs. lb. .17 - —
Nicaragua, hulled, shipt., bgs. lb. .25 - —
nat., bgs lb. .16½- —
Salvadorian, natural, bgs lb. .21½- —
Indian, natural, bgs. lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb. lots lb. .52 - —
bbls., 1,500-lb. lots lb. .53 - —
kgs., 1,500-lb. lots lb. .54 - —
refd., bgs., 1,500-lb. lots lb. .62 - —
bbls., 1,500-lb. lots lb. .63 - —
kgs., 1,500-lb. lots lb. .64 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots lb. .41 - .42
No. 2, bgs., 10-bg lots lb. .40 - .41
Superfine, bgs., 10-bg. lots lb. .38 - .39
Shellac in 1 to 10-bg. lots 1c. per lb more.
Shingle stain oil (see Oil shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton. 25.00 - —
t.c.l. works, exwhse ton. 45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton. 20.00 - —
t.c.l., works ton. 25.00 -30.00
140 mesh, bgs., c.l., works ton. 15.00 - —
t.c.l., works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
t.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs. Troy oz. .91⅛- —
Cyanide fib dms., 2,500-oz. lots, oz. .87 - —
1,000-oz. lots oz. .87⅜- —
500-oz. lots oz. .87½- —
100-oz. lots oz. .87¾- —
Nitrate, CP cryst., bots., 2,500-oz. lots oz. .62⅜- —
1,000-oz. lots oz. .63½- —
500-oz. lots oz. .64⅛- —
250-oz. lots oz. .64⅝- —
USP granular silver nitrate 4c. per oz higher.
Proteinate mild USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
strong, NF bots. dms., 1,000-oz. lots oz. 1.10 - —
Soapbark, whole, bls lb. .38 - .40
crushed, bls., bbls lb. .45 - —
powd., bbls lb. .45 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
t.c.l., stock points 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
t.c.l., stock points 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.70 - —
t.c.l. stock points 100 lbs. 5.80 - —
liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.90 - 3.00



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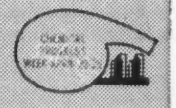

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Soda, caustic, 73%, sellers' tanks, works, dry basis..100 lbs. 3.00 - —
rayon-type sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
76%, dms., c.l., works..100 lbs. 4.30 - —
l.c.l., stock points 100 lbs. 5.50 - —
Sal, conc., bgs., c.l., works.100 lbs. 2.50 - —
smaller lots, works 100 lbs. 2.80 - —
Sodium acetate anhyd. ogs., c.l., frt. equald lb. .13 - —
dms., l.c.l., frt. equald .... lb. .13¾ - —
NF 60% gran dms., c.l., works lb. .14 - —
l.c.l. works lb. .15½ - —
Alginate NF white powd., dms., 300 lbs. or more lb. .93 - —
p-Aminohenzoate, dms. 1,000-lb. lots or more lb. 2.35 - —
smaller lots lb. 2.45 - 2.55
p-Aminosalicylate, dms., 100 lbs. or more, frt adjusted lb 2.70 - —
Antimoniate, bbls. c.l. dlvd E. lb. .28 - —
l.c.l., dlvd. E lb. .29½ - —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb. .12½ - —
l.c.l. works lb. .13¾ - .14½
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼ - —
l.c.l., works lb. .13 - .14½
soln dms. works gal .59 - .67
Ascorbate, dms., 25-50 kilo lots.kilo.12.00 - —
10-kilo lots kilo 12.35 - —
5-kilo lots kilo.12.75 - —
1-kilo lots kilo.13.00 - —
bots., 500-gram lots kilo.13.50 - —
Benzoate, tech., bbls., dms., lots or more lb. .39 - —
USP bbls. dms. 100-lb lots or more lb 46 - —
Bicarbonate, USP, gran. bgs., c.l., works 100 lbs. 2.95 - —
l.c.l., works 100 lbs. 3.85 - —
powd., bgs., c.l., works. 100 lbs. 2.55 - —
l.c.l., works 100 lbs. 3.45 - —
Bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
l.c.l., works lb. .13½ - .14¾
Bifluoride bbls. c.l. works, frt. equald lb. .19½ - —
l.c.l., same basis lb. .1990 - —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 - —
dms., c.l. frt equald 100 lbs 3.00 - 3 60
l.c.l. frt. equald 100 lbs 3.50 - 4 10
Bisulfite anhyd bgs. c.l. works. 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.40 - —
soln. 35° bots. c.l., works. 100 lbs 1.55 - —
l.c.l. works 100 lbs 2.05 - —
Borate (see Borax).
Bromide, USP bbls., works lb. .38 - —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated, (see Soda, sal).
monohydrated, bgs. c.l. works. 100 lbs. 3.10 - —
l.c.l., works 100 lbs. 3.50 - —
Chlorate cryst. dms. c.l. works. lb. .09 - —
l.c.l., works lb. .09½ - .10½
Chloride, tech. (see Salt).
Chlorite tech. dms. c.l., works. lb. .58 - —
20-ton lots or more works lb. .66 - —
smaller lots works lb .70 - .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
l.c.l. works lb .28 - —
Chromate, anhyd. fiber dms., c.l., t.l., works lb. .14¾ - —
l.c.l., same oasis lb. .15¼ - .16½
tetrahydrate, bgs., c.l., t.l., works lb. .1015 - —
l.c.l lb. .1065 - .1190
Citrate, anhyd., dms lb. .62 - —
NF VIII, gran. dms lb. .26½ - .27½
USP, XIV gran. dms lb. .29½ - .30½
Sodium citrate USP powd. prices ½c higher
Cyanate, dms., 1,000-lb. lots, works. lb. .85 - 1.10
smaller lots works lb 1.00 1.25
Cyanide, flake, 96-98%, dms., c.l or 20,000-lb. lots lb. .193 - —
over 1,000-lb. lots lb. .203 - —
100-lb. to 1,000-lb. lots lb. .213 - —
Granular sodium cyanide 1c. higher
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
l.c.l. works lb. .15¾ - —
anhyd., dms., c.l. works lb. .18 - —
l.c.l. works lb. .18¾ - —
Ferrocyanide, bgs., 10-ton lots lb. .13½ - —
smaller lots lb. .14 - —
Fluoride, white, 97% fib. dms., c.l., works, frt equald lb. .1390 - —
l.c.l., works lb. .1430 - —
Formate bgs., c.l. works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Gentisate, 100-lb. fib. dms lb. 5.50 - —
Gluconate, refd. dms. lb. .80 - .83
tech dms lb. .35 - —
Hydride, dms., works lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate)
Hydrosulfite, dms., c.l., frt. alld. lb. .24 - —
l.c.l. frt alld lb. .24½ - —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .25½ - .28
technical (see Soda Caustic)
Hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Hyposulfite, anhyd. tech., bgs., c.l., works 100 lbs. 7.25 - —
l.c.l., works 100 lbs. 7.65 - —
photo grade, bgs. c.l., works. 100 lbs. 8.05 - —
l.c.l., works 100 lbs. 8.45 - —
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l. works 100 lbs. 5.55 - —
photo grade bgs., c.l., works, 100 lbs. 7.75 - —
l.c.l., works 100 lbs. 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works 100 lbs. 5.55 - —
Iodide, USP, bots., dms lb. 2.55 - —
Lactate, edible, 50%, cbys., dms., works lb. .21½ - —
60% cbys. dms. works lb 26½ - —
Lauryl sulfate, dms. c.l., dlvd lb. .19 - —
l.c.l., dlvd lb. .19½ - .20¾
tanks, dlvd lb. .18 - —
Metabisulfite (see Sodium bisulfite).
Metaborate octahydrate, gran., bgs., c.l., works ton.87.00 - —
ton lots, ex whse ton.143.00 - —
smaller lots, ex whse ton.148.00 - —
tetrahydrate, dms., c.l., works. ton.204.00 - —
ton lots, ex whse ton.242.50 - —
smaller lots, exwhse ton.247.50 - —
Metallic bricks, 14,000-lb. lots or more, works lb. .19½ - —
fused, 14,000-lb lots, works. lb. .19 - —
tanks, works lb. .17 - —
Metanilate, bbls., frt. alld lb. .62 - —

Sodium Metasilicate, anhyd., bgs., c.l., works..100 lbs. 5.70 - —
l.c.l. works 100 lbs. 6.15 - 6.10
dms., c.l 100 lbs. 6.20 - —
l.c.l. 100 lbs. 6.65 - 6.55
Pentahydrate, bgs., c.l., works. 100 lbs. 4.45 - —
l.c.l. works 100 lbs. 4.85 - 6.75
dms., c.l. works 100 lbs. 4.95 - —
l.c.l., works 100 lbs. 5.35 - 7.25
Molybdate, anhyd. dms., works, frt. equald lb. .92 - 98
cryst. dms. works frt. alld lb. .73 - 74
Monoglutamate (see Monosodium Glutamate).
Monohydrate (see Sodium carbonate monohydrated).
Naphthionate, bbls lb. 70 - —
Nitrate crude dom. bgs., c.l., works ton.47.00 - —
bulk c.l. works ton 43.50 - —
imp 100-lb bgs., c.l. Atl. Gulf, Pac., whse ton.49.50 - —
bulk, c.l same basis ton.46.00 - —
Nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 8.50 - —
l.c.l. same basis 100 lbs.10.50 - —
Orthosilicate conc., dms., c.l., works 100 lbs. 6.70 - —
l.c.l., works 100 lbs. 7.05 - 7.65
hydrated, flake, bbls. c.l., works. 100 lbs. 5.65 - —
l.c.l., works 100 lbs. 7.60 - 7.90
Oxalate, 88% bgs., works 100 lbs.10.85 - —
Para-aminobenzoate (see Sodium p-Aminobenzoate)
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works. frt equald lb. .26 - —
l.c.l. same basis lb. .27½ - .34
pellets, bgs., c.l., same basis lb. .26 - —
l.c.l., same oasis lb. .27½ - .34

Soda, Caustic, Liquid—Sodium Sesquicarbonate

Sodium pentachlorophenate, powd., bgs., dms., c.l., same basis. lb. .23 - —
l.c.l. same basis lb. .26½ - .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices
Perborate, NF, tech., bgs., c.l., works. lb. .19 - —
l.c.l., works lb. .21 - —
Peroxide, dms., c.l., dlvd. E. of Miss. lb. .20 - —
l.c.l. same basis lb. .20½ - .21
Phenolsulfonate USP IX, gran., dms lb. .48 - .49
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald..100 lbs. 7.03 - —
l.c.l., works 100 lbs. 8.03 - 8.65
duohydrate, bgs., c.l., frt. equald..100 lbs. 7.60 - —
l.c.l., frt. equald..100 lbs. 8.10 - —
USP dried powd bgs., dms., works lb. .19 - .20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
l.c.l. frt equald 100 lbs 9.10 9.70
tribasic, anhyd., bgs., c.l., frt. bgs., c.l., frt. equald..100 lbs. 8.65 - —
l.c.l., frt equald 100 lbs 9.05 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 - —
l.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.

Sodium prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate acid, bgs., c.l., works, frt. equald 100 lb.10.85 - —
l.c.l., works 100 lbs.11.60 - 11.85
Ferric, dms., c.l., t.l., works lb. .36 - —
l.c.l., works lb. .37 - .39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½ - —
l.c.l. frt equald 100 lbs 7.92½ - 8.52½
Salicylate, USP dms lb. .74 - .76
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.35 - —
l.c.l., dlvd. zone 1....100 lbs. 4.10 - 4.35
zone 2 ....100 lbs. 4.35 - 4.60
zone 3 ....100 lbs 4.75 - 4.90
zone 4 ....100 lbs 5.35 - 5.60

Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va. Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport) Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev. N. M., Utah, Wyo and El Paso, Tex.

This man helps move 175 carloads of caustic at a time

(He's a deck officer on the Marine Dow-Chem)

After a few terse commands from the bridge, the 18,000-ton *Marine Dow-Chem* glides silently into the night.

With her cargo of vital chemicals the *Dow-Chem* plies her way to key Dow terminals. In her storage tanks there is enough caustic soda to fill 175 tank cars.

Typical of the foresighted Dow attitude of solving a problem before it arises, the *Dow-Chem* was commissioned in 1954 with an eye to the future needs of industry. Today, this specially equipped ship is an important part of our vast distribution system.

As demand increases, Dow will continue to lead the way in developing new methods to deliver caustic soda to your doorstep in any form or quantity. THE DOW CHEMICAL COMPANY, Midland, Mich., Dept. AL 600A.

YOU CAN DEPEND ON DOW

Sodium Sesquisilicate—Sulfur Monochloride

Sodium sesquisilicate, hydrated, bgs., c.l., works	100 lbs.	5.00	—
l.c.l., works	100 lbs.	5.35	—
dms., c.l., works	100 lbs.	5.50	—
l.c.l., works	100 lbs.	5.85	—
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l. works	100 lbs.	1.55	—
l.c.l., works	100 lbs.	1.90	2.40
tanks, works	100 lbs.	1.20	—
47° Be, turbid, 1:2.9, dms., c.l., works	100 lbs.	2.25	—
l.c.l., works	100 lbs.	2.95	3.10
tanks, works	100 lbs.	1.90	—
52° Be, turbid, 1:2.4, dms., c.l., works	100 lbs.	2.65	—
l.c.l., works	100 lbs.	3.00	3.50
tanks, works	100 lbs.	2.30	—
solid, 1:3.2, bgs., works	ton.	67.50	—
Silicofluoride, bgs. c.l. works	lb.	.075	—
l.c.l. works	lb	079	—
Sodium silicofluoride in dms. 0.4c per lb higher			
Stannate dms. works frt alld. E	lb.	.648	.707
Sulfa drugs (see Sulfa name)			
Sulfanilate, bbls., works	lb	22	—
Sulfate, NF, VII, dried, powd., dms	lb.	22½	—
tech. anhyd. bgs. c.l., dlvd E	ton.	52 00	—
detergent, rayon grade, bgs., c.l., works	ton.	34.00	—
bulk, c.l., works	ton.	31.00	—
USP, cryst., fib dms	lb	.17½	.18
gran., fib. dms	lb	.17½	.18

Sodium sulfhydrate, flake, 70-72%, dms., c.l., works	lb.	.06¾	—
l.c.l., works	lb.	.07¾	—
liq., 40-44% tanks, works, 100% basis	ton.	120.00	—
Sulfide, flake dms., c.l., works, E., frt. equald	lb.	.05½	—
l.c.l., same basis	lb.	.06½	—
fused, bbls., c.l. works E., frt. equald	lb.	.05	—
l.c.l., same basis	lb	.06	—
Sulfite, anhyd., bgs., c.l.	100 lbs.	3.50	—
t.l., same basis	100 lbs.	4.00	—
Sulfocyanide, CP (see Sodium thiocyanate).			
Tetraborate (see Borax).			
Tetrasulfide, liq., 40%, dms., c.l., c.l., works	lb.	04	—
l.c.l., works	lb.	05	—
Thiocyanate, CP, dms.	lb.	.55	.65
tech. anhyd. dms., 1 ton lots or more, works	lb	317	—
less than ton lots works	lb	337	—
Thiosulfate, NF, cryst., bbls	lb.	.13½	—
tech (see Sodium hyposulphite)			
Titanate, ctns., c.l., works	lb.	.14¼	—
5-ton lots, works	lb.	.14½	—
1-ton or less, works	lb.	.14¾	—
Toluene sulfonate, dms., c.l. or t.l	lb	.38	—
l.c.l.	lb.	.42	—
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E	lb.	.37½	—
l.c.l., frt. adjusted, E	lb	39½	—

Sodium trichloroacetate, 90%, 50-lb. dms., c.l., frt. alld. E	lb.	.38	—
l.c.l., frt. adjusted E	lb.	.40	—
10-lb. cns., c.l., frt. alld E	lb.	.44	—
l.c.l., frt. adjusted E	lb.	.46	—
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.			
Tripolyphosphate, bgs., c.l., works, frt. equald	100 lbs.	7.87½	—
l.c.l., same basis	100 lbs.	8.27½	8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works	100 lbs.	8.65	—
l.c.l. works	100 lbs	9.40	9.80
dms., c.l., works	100 lbs.	9.05	—
l.c.l. works	100 lbs	9.80	10.40
Tungstate tech. kgs. dlvd. E	lb	2.15	—
Sodium-ammonium phosphate, purif., cryst., dms., works	lb.	.52	—
Sodium-carboxymethyl cellulose (see CMC)			
Sodium cinchophen (see Cinchophen-sodium)			
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd	lb.	.21	—
l.c.l., same basis	lb.	.21½	—
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works	lb.	.28	—
smaller lots same basis	lb.	.30	—
Solvent naphtha, coaltar, high flash, tanks, frt. equald	gal.	.31	.35
petroleum (see Petroleum solvent, partial aromatic)			
Sorbitan monostearate, fib dms., 20,000-lb. lots, works	lb.	.32	—
10,000 to 20,000-lb lots, works	lb.	.34	—
smaller lots, works	lb.	.37	.39
Tristearate, fib dms., 20,000-lb. lots, works	lb.	.33	—
10,000 to 20,000-lb lots, works	lb.	.35	—
smaller lots, works	lb.	.38	.40

Sorbitol, cryst., resin grade, pellets, dms., c.l., works	lb.	.23	—
1 to 5-ton lots, works	lb.	.25	.26
powd., dms., 1 to 5-ton lots, works	lb.	.38	—
soln., coml., aqueous, dms., c.l., works	lb.	.24¼	—
ton lots, works	lb.	.25	—
smaller lots, works	lb.	.25¼	—
tanks, works	lb.	.23¼	—
reg. 70% aqueous, dms., c.l., works	lb.	.16	—
ton lots, works	lb.	.16¾	—
smaller lots, works	lb.	.17	—
tanks, works	lb.	.15	—
Soybean meal, 44% bulk, Decatur.	ton.	47.00	—
protein, chemically isolated, bgs., c.l., works	lb.	.23	—
mechanically refd., bgs., l.c.l., works	lb.	.066	—
Sparteine sulfate, cns.	oz.	.80	.90
Spearmint leaves, dom., bls	lb.	75	—
Spruce extract, liq., reg. tanks, works	lb.	.01¾	—
powd. super, bgs., c.l., works	lb.	.05¼	—
l.c.l., works	lb.	.05½	—
Squill, white, bls	lb.	.16	.18
powd., bbls., bxs	lb.	.17	.20
St. John's bread edible, bls	lb.	.13	.15
Stannic chloride, anhyd., dms., works	lb.	.804	.814
Oxide, dms., dlvd. E	lb.	1.08½	1.09½
Stannous chloride, anhyd., dms., works	lb.	.933	1.427
hydrous, cryst., dms., works	lb.	.81½	.82½
Sulfate, dms., works	lb.	1.067	1.087
Starch, corn pearl, paper bgs., c.l.,	100 lbs.	7.32	—
l.c.l.	100 lbs.	7.47	—
powd., paper bgs., c.l.	100 lbs.	7.44	—
l.c.l.	100 lbs.	7.59	—
Prices for corn starch in cotton bags, 15c per 100 lbs. higher			
Potato, dom., Idaho bgs., c.l., works	lb.	.06	—
Maine, bgs., c.l., works	lb.	.06¼	—
ex whse, N. Y.	lb.	.08¼	.09¼
Rice, bgs., l.c.l.	lb.	.15½	.16
Wheat, bgs	lb.	.08½	.09
Star root (see Helonias root).			
Stargrass Root (see Aletris root).			
Stavesacre seed, bgs	lb.	.60	.61
Stearine oleo (see Oleostearine).			
Stramonium leaves, bgs	lb	.18	.20
Streptomycin hydrochloride bulk, gram	lb.	.0850	.0875
Strontium bromide, NF, dms., 150-lb. fib. dms	lb.	.88	—
Carbonate, pure, dms., 5-ton lots or more, works	lb.	.35	—
1-ton lots, works	lb.	.37	—
tech., dms., works	lb.	.19	—
Chromate, bbls., works	lb.	.46	—
Iodide, pars, 25-lb. lots	lb.	3.25	—
Nitrate, bbls., c.l., works	100 lbs.	11.00	—
l.c.l., works	100 lbs.	12.00	—
Salicylate, NF dms.	lb.	1.78	—
Sulfate, air floated, 90%, 325 mesh, bgs., works	ton.	56.70	66.15
Strophanthin, K., bots.	oz.	25.00	25.50
G. (see Ouabain, USP).			
Strophanthus seed, Kombi, biologically tested, bgs	lb.	3.50	3.75
Styrax, USP cs	lb.	.78	.80
Styrene monomer, polymer grade, 99½% dms., c.l. frt. alld.	lb.	.22½	—
l.c.l. same basis	lb.	.23½	—
tanks, same basis	lb.	.20½	—
synthetic rubber grade, 99%, dms., c.l., frt. alld.	lb.	.18½	—
l.c.l., same basis	lb.	.19½	—
tanks, same basis	lb.	.16	—
Styrolyl acetate, bots	oz.	1.45	1.70
Sucrose, refd., white, bgs., refy., E	lb.	.0885	—
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works	lb	76	—
Sugar (see Sucrose).			
Sulfabenzamide, dms.	lb	4.00	4.50
Sodium dms	lb	4.10	4.60
Sulfacetamide, fib. dms.	lb	4.00	4.20
USP, same basis	lb.	5.00	5.20
Sodium fib dms.	lb	5.00	5.20
USP, same basis	lb.	5.20	5.40
Sulfadiazine USP, microcrystals, dms	lb.	10.60	11.10
powd. dms	lb.	10.25	10.75
Sulfadiazine-sodium, USP dms	lb.	11.25	11.75
microcrystals, dms.	lb.	11.60	12.10
Sulfaguanidine USP dms	lb	2.50	—
Sulfamerazine USP, microcrystals	lb.	10.65	11.15
Sulfamerazine-sodium, USP dms.	lb.	11.25	11.75
Sulfamethazine, microcrystals, dms.	lb	8.90	9.40
powd. dms	lb	8.50	9.00
Sulfanilamide USP 30-80 mesh, dms	lb.	1.40	1.60
microcrystals, dms	lb	1.70	1.90
powd. dms	lb.	1.30	1.50
Quinoxaline, veterinary, dms	lb	6.40	6.75
Sulfapyridine NF powd. bots. tins.	lb.	7.00	7.50
Sulfapyridine-sodium, monohydrate, dms	lb.	7.50	8.00
Sulfathiazole, NF, microcrystals, dms	lb	2.85	3.00
powd. dms	lb	2.50	2.65
Sulfathiazole-sodium, NF, dms	lb.	2.75	2.90
Sulfur, coml., flour, bgs., mines.	100 lbs.	2.55	—
bbls., mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs.	2.45	—
bbls., mines	100 lbs.	2.90	—
crude, bulk, f.o.b. cars, mines.	long-ton.	26.50	—
export f.o.b. vessels Gulf ports.	long-ton.	28.00	—
domestic and Canada, f.o.b. vessel Gulf port	long-ton.	28.00	—
refd., flowers, USP, bgs., mines	100 lbs.	4.25	—
bbls., mines	100 lbs.	5.50	—
flour, light, bgs., mines	100 lbs.	3.85	—
bbls., mines	100 lbs.	4.75	—
lump, bgs., mines	100 lbs.	3.55	—
rolls, bgs., mines	100 lbs.	4.10	—
bbls., mines	100 lbs.	4.65	—
salt block, bbls., mines	100 lbs.	3.75	—
virgin block, bbls., mines	100 lbs.	3.70	—
rubbermakers, coml., reg. bgs., mines	100 lbs.	2.65	—
bbls., mines	100 lbs.	3.80	—
98-100% passing through 325 mesh, bgs., mines	100 lbs.	2.75	—
bbls., mines	100 lbs.	3.90	—
refd., bgs., mines	100 lbs.	3.50	—
bbls., mines	100 lbs.	4.55	—
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.95	—
bbls mines	100 lbs.	4.10	—
Sulfur dichloride, dms., c.l., works, frt. equald	lb.	.04	—
l.c.l. same basis	lb.	.04¾	—
tanks same basis	lb.	.03¾	—
Dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	.12
multi unit cars, works	lb.	.0535	—
tanks works	lb.	.045	—
refrigeration 150-lb. cyls. dlvd.	lb.	.30	—
Monochloride, 55-gal. dms., c.l., frt. equald	lb.	.04	—
l.c.l. same basis	lb	.04¾	—
tanks, same basis	lb.	.03¾	—

Helpful answers to CAUSTIC QUESTIONS

As a leading producer of Caustic Soda, Columbia-Southern is asked many questions every month about this versatile, widely-used alkali. While the answers probably are not completely new to every Caustic Soda user, they do re-emphasize certain basic points that shouldn't be forgotten. We hope that you will find this series interesting and helpfully informative.

What is the necessary raw material for Caustic Soda?

Plentiful supplies of brine are required for the electrolytic production of Caustic Soda. This process also liberates Chlorine as a co-product. An electric current is passed through a sodium chloride brine solution contained in specially-designed cells. A 10-12% Caustic Soda solution forms at the cell's cathode. This low concentration liquor is evaporated to yield the various concentrations desired.

Is Caustic Soda an element?

No. Caustic Soda is a compound of sodium, hydrogen, and oxygen. It is known chemically as sodium hydroxide, and is commonly called lye.

How much liquid Caustic is now produced?

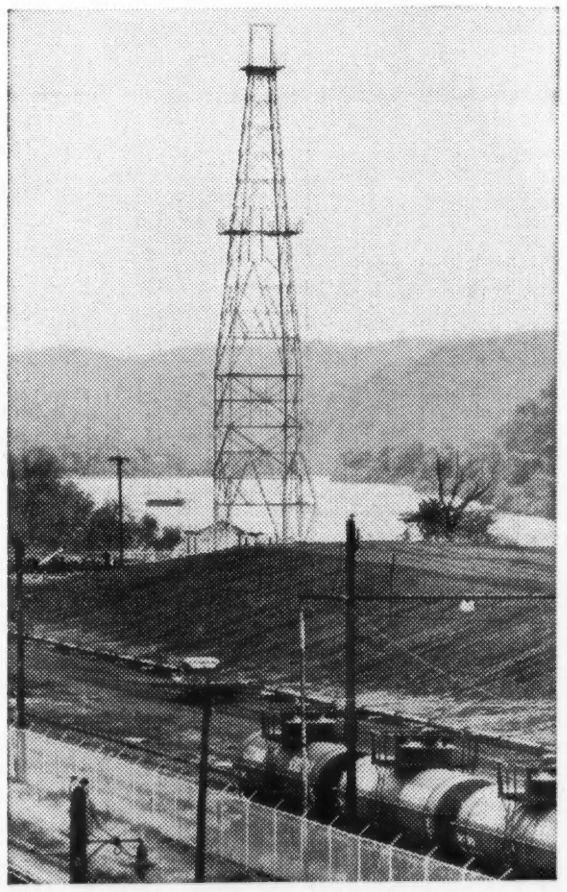
Latest six-month figures for the January-July 1956 period set the production of liquid Caustic at 2,169,368 short tons for electrolytically manufactured, 260,899 short tons for lime-soda process.

What type of pumps are recommended for the transfer of Caustic liquor from tank cars to storage, and from storage to the point of use?

Centrifugal pumps do the job best. All-iron construction with no brass or bronze fittings is generally preferred. For high temperature use, nickel or nickel alloy pumps will give longer service and the liquor will show less metallic contamination.

Who currently uses the most Caustic?

The chemical processing industry itself is by far the largest group user of Caustic, consuming roughly 25% of all production. Rayon and film producers rank second, followed by such large volume consumers as the petroleum refining, pulp and paper, cleaners, soap, textile, metals, vegetable oils, and rubber industries.



SOME OF THE WORLD'S DEEPEST BRINE WELLS, operated by Columbia-Southern to supply the New Martinsville, W.Va., Caustic Soda-Chlorine plant, draw salt brine from depths of a mile and a quarter.

How much water is required to dilute a tank car of 73% Caustic solution to a more easily stored 50% concentration?

About 6,100 gallons of dilution water are needed to bring an 8,000 gallon tank car of 73% down to 50% strength; 7,650 gallons of water to dilute each 10,000 gallon car.

How can each user determine the most economical grade and form of Caustic to buy?

Much, of course, depends upon the user's end product and processing requirements. Solid, standard flake, 50% and 73% solution, all have certain advantages. Processing advances, transportation developments and freight rate changes, however, dictate a periodic review of your purchasing. Columbia-Southern will be happy to look for economies you might well realize . . . at no obligation to you. Call, write or wire our Pittsburgh address for the prompt services of experienced Caustic Soda specialists.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

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U.S.I. CHEMICAL NEWS

Feb. ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1957

Ludlow Succeeds Keane as Director of U.S.I. Sales

Alden R. Ludlow, Jr. has been named Director of Sales for U.S.I., succeeding Lee A. Keane who has just retired. Mr. Ludlow has been Manager of Alcohol Sales for the past ten years.

He will now have full charge of the nationwide U.S.I. sales organization, responsible for marketing all of the company's product lines.

Alcohol Reduces Friction In Aluminum Grinding, Says Russian Report

A 44% decrease in friction when grinding aluminum with the aid of ethyl alcohol, compared with results obtained in air, is reported by a Russian experimenter at the Siberian Physico-Technical Institute. At the same time it was noted that abraded mass decreases 34% and specific energy 14% compared with results obtained in air.

The investigation was conducted to learn more about how liquids actually aid in the cutting and grinding of metals. Some Russian research men have claimed that these liquids loosen the metal molecules at the working surface. Others have deduced that they make the metal more brittle.

This investigator has concluded, in the case of grinding aluminum with the aid of ethyl alcohol, that the liquid forms a buffer layer which decreases the pressure of the load and so decreases the force of friction.

Have You a New Product To Tell the World About?

Make it routine to send your publicity releases on new products and developments to the Editor of U.S.I. Chemical News, often called the "Front Page of the Chemical Process Industries." The issue you are reading right now will be printed in over 250,000 copies of the leading publications serving the chemical and related fields. The Technical Developments column alone will probably produce over 600 inquiries, judging from the past average. You incur no charges or obligations by sending us your new product releases. The material will be judged and used solely on the basis of newsworthiness and space limitations. And of course we cannot guarantee that your item will definitely appear because of these considerations.

Address the Editor, *U.S.I. Chemical News,* U.S. Industrial Chemicals Co., Division of National Distillers Products Corporation, 99 Park Ave., New York 16, N. Y.

Medium-Density Polyethylene Is Now Available from U.S.I.

Expansion to 100 Million Pounds per Year Will Place Plant Among World's Largest; Output to Include Conventional and Higher Density Resins

New production techniques are yielding higher density polyethylene resins at the Tuscola, Illinois plant of U.S.I.'s subsidiary, National Petro-Chemicals Corporation. These materials are designed for use where the conventional (low-density) resins do not quite meet requirements for certain applications. They have greater stiffness and tensile strength than the conventional grades, and a higher softening point. Low temperature brittleness and vapor permeability characteristics also improve with increasing density. On the other hand, as density gets higher, film brittleness tends to increase while tear and impact strengths tend to decrease.

The MCA Technical Data Book for Plastics identifies polyethylene resins according to densities in the following manner:

LOW DENSITY	— 0.912 to 0.925
MEDIUM DENSITY	— 0.926 to 0.941
HIGH DENSITY	— 0.942 to 0.965

Expansion Doubles Plant Size

Total resin capacity of the polyethylene unit will be 100 million pounds per year when present expansion is completed. This unit had a design capacity of 26 million pounds per year when it came onstream in February of 1955 but is currently operating at twice that output. The ethylene plant and the extraction, fractionation and power plants at the integrated Tuscola petrochemical facilities are also being enlarged to supply the polyethylene plant.

MORE

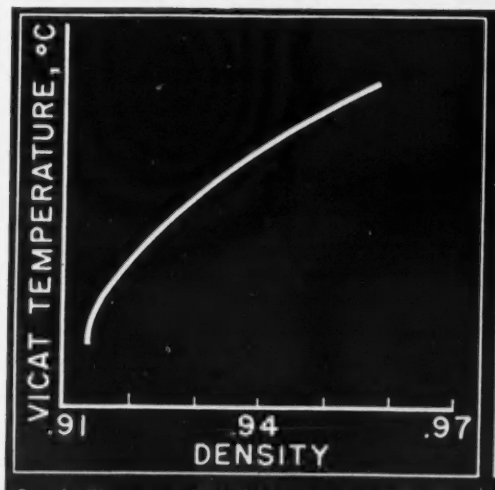
New Volume on Metallurgy Of Titanium Just Published

A 466-page reference book on "Titanium" has just been published as Volume 4 in a series on the "Metallurgy of Rarer Metals" by the British writing team of McQuillan and McQuillan. Comprehensive and highly readable, the volume combines both academic and industrial findings on titanium, covering its history and occurrence, recovery from ores, preparation, purification, properties and reactions.

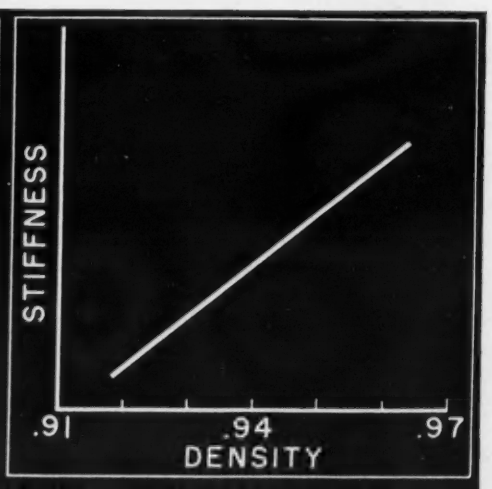
The larger part of the book is concerned with the properties of titanium and its alloys. One long chapter deals with fabrication and joining. Other sections cover physical properties, mechanical properties, heat-treating and mechanical properties of titanium-rich alloys, deformation mechanisms and textures, transformations in titanium and its alloys.

A chapter on the constitution of titanium alloys describes the problems which arise in studying these systems and goes into the determination of phase boundaries. Binary and ternary systems are discussed. A separate chapter is devoted to titanium metallography.

The important subject of titanium's reactions with gases is covered fully, with particular reference to oxygen, nitrogen and hydrogen. The behavior of titanium in aqueous solutions and in the presence of common corrosive agents is also included.



Graph illustrates how heat distortion (VICAT) temperature varies as density of polyethylene increases, molecular weight and molecular weight distribution remaining constant.



Graph illustrates how stiffness varies as density of polyethylene increases, molecular weight and molecular weight distribution remaining constant.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared by U. S. Industrial Chemicals Co.*

Feb. ★

U.S.I. CHEMICAL NEWS

★ 1957

CONTINUED

Expansion

High Pressure Process Modified

By modifying high pressure techniques now employed at Tuscola for making conventional, low-density resins, the plant is also able to manufacture medium and high density materials in the same equipment. U.S.I. will concentrate, for the present, on producing medium-density polyethylenes by these modified techniques.

U.S.I. has been marketing conventional, low-density polyethylenes (0.92) under the trade name PETROTHENE® since February of 1955. In use, the PETROTHENES have shown an inherent superiority in certain properties such as stress crack resistance, processibility and uniformity. Field tests on the new medium-density resins, closely akin to the conventional grades, have indicated similar superiority. However, as density is increased, there is the possibility that these proven properties could vary. A great deal of work must be done to develop the best of all possible high-density resins, and so U.S.I. plans to move slowly on the production of these materials. The goal: to improve other properties without sacrificing superiority in those properties already proved.

Resins Can be Tailor-Made

Flexibility of the production techniques now being employed at the Tuscola plant adds a new dimension to polyethylene's range of properties. This plant has been supplying plastics processors with polyethylene grades especially suited to particular processing conditions and end uses. Now with the ability to vary density, the plant can provide the same property variations as before—at new density levels. As a result, processors of polyethylene can obtain a tremendous variety of raw materials with a wide range of characteristics.

Methionine Counteracts Toxin in Plant Disease

The poisonous action of a naturally occurring antimetabolite of methionine which causes wildfire disease in tobacco plants can be overcome by methionine, according to a recently published report.

Some Grignard Reagents Can Now be Prepared by An Easy Sodium Route

An economical route has now been opened to the preparation of certain Grignard reagents difficult to obtain by direct reaction from chlorohydrocarbons. Recent studies at the U.S.I. Research Laboratories in Cincinnati have demonstrated that organomagnesium compounds may be prepared in hydrocarbon solvents from organosodium compounds and anhydrous magnesium chloride. The use of ethers may be avoided completely if desired. Organolithium compounds may be similarly prepared from organosodium compounds and anhydrous lithium chloride.

Sodium dispersions for preparation of organosodium compounds can be prepared in this package pilot plant unit, which is available on loan from U.S.I. Research Division.

These developments will be discussed in detail by Dr. John Nobis of the U.S.I. Research Division in a paper to be presented before the ACS Symposium on Metal-Organic Compounds this April. The paper, entitled "Use of Organosodium Compounds for Preparation of Other Carbon-Metal Bonds" will also describe reactions with the halides of boron, aluminum, silicon, titanium, tin and phosphorus, or in some cases, their alkoxides.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing the Editor, U.S.I. Chemical News.

New x-ray microscope just developed promises to reveal hidden facts concerning corrosion in metals, effect of contaminants in metals, soundness of electroplated coatings, etc. Also probes internal structure of foods, chemicals. **No. 1200**

Polyethylene Buchner funnel of 2-piece construction can now be obtained, claimed sturdy and easily cleaned. Takes 70 mm. filter paper. Perforated plate diameter 71 mm. **No. 1201**

Heptane and hexane in spectrophotometrically-pure grades are now available commercially. Each bottle is supplied with the absorbance curve for that particular lot, thus guaranteeing that impurities are negligible. **No. 1202**

New battery with practically unlimited shelf life is said to withstand temperatures from —70 to 170°F. Designed for low-current use, it weighs less than an ounce, is of completely dry construction, is rated at 95 volts. **No. 1203**

Spent fuel elements from AEC Materials Testing Reactor now available in limited quantity for rental to licensees as source of gamma radiation. Priority given to requests for elements for research and development activities. **No. 1204**

A micro-image data storage and retrieval device recently developed gives rapid access to any of 10,000 frames recorded in miniature on a 10 in. sq. sheet of microfilm. It automatically and continuously searches the film and photographs a frame every 2 seconds. **No. 1205**

Titanium in the form of a 50% cationic colloidal dispersion is now offered to the textile industry as a duller for synthetic fabrics and fibers. Said to give even exhaustion, good light reflectance and soft hand. **No. 1206**

Fluid turbidity can now be continuously monitored with a new dual beam unit, manufacturer claims. Instrument compares light scattered by suspended particles with light transmitted by the fluid. Usable on streams up to 3" diameter. **No. 1207**

N-Acetyl DL-Homocysteine Thiolactone is now commercially available for use in medical research, food technology, rubber stabilization, textile processing. Reacts with amino groups of amino acids, peptides or proteins to form new peptide bonds and a free sulfhydride group. **No. 1208**

Hot plate — magnetic stirrer combination is now offered to speed mixing and dissolving in the lab. Motor is effectively insulated from hot plate, it is claimed, and copper-jacketed heating elements eliminate magnetic interference and corrosion. **No. 1209**

PRODUCTS OF U.S.I.

POLYETHYLENE RESINS:

PETROTHENE® 100 Series—high quality resins for uses demanding outstanding properties.

PETROTHENE 200 Series—general purpose resins for extrusion, injection, compression molding and paper coating.

PETROTHENE 300 Series—resins for wire covering and electrical insulation applications.

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.

Inorganic Chemicals: Ammonia, Caustic Soda, Chlorine, Metallic Sodium, Sodium Peroxide, Sulfuric Acid.

Esters, Ethers and Ketones: Normal Butyl Acetate, Dibutyl Phthalate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone.

Intermediates and Fine Chemicals: Acetoacetarylides, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate solution, Urethan USP (Ethyl Carbamate).

Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, Curbay B-G® 80, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin A, D_3 and K_3 products, Antioxidant (BHT) Products.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Riboflavin USP, Urethan USP, Intermediates.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
99 Park Avenue, New York 16, N. Y.

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Sumac leaves, 20% tannin, bgs., ex-dock ton 130.00 - —
ground, bgs., ex-dock ton 130.00 - —
Superphosphate, run-of-pile, under 22% a.p.a pulv., bulk, c.l., Balto., unit-ton .88 - .91
Carteret, N. J. unit-ton .88 - .91
triple, 40% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton .98 - —

T

2,4,5-T dms., c.l., works, frt. equald lb 1.18 - —
l.c.l., same basis lb 1.25 - —
Isopropyl ester dms., c.l., works, frt. equald lb 1.24 - —
l.c.l., works lb 1.29 - —
Talc, dom., ord. Calif. grd., bgs. c.l., works ton 33.00 - 39.50
Vermont off color grd., bgs. c.l., works ton 19.40 - —
l.c.l. works ton 37.00 - —
fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
l.c.l., works ton 31.00 - 36.00
99.5% 325 mesh, bgs. c.l. works ton 31.00 - —
l.c.l., works ton 34.00 - —
99.95% micronized, bgs. works ton 38.00 - —
tmp Canadian grd bgs. c.l. mines ton 80.00 - 95.00
Tallow, edible, tanks, dlvd lb .14½ - —
inedible, fancy, bleachable, tanks, dlvd lb .07¾ - —
guaranteed, dms., f.a.s. lb .09¼ - —
No. 1, tanks, dlvd lb .06⅞ - —
prime, tanks, dlvd lb .07½ - —
special tanks, dlvd lb .07¼ - —
sulfonated, 25% bbls., l.c.l lb .08⅝ - .08⅞
50%, bbls., l.c.l lb .09⅝ - .10⅛
Tankage, animal, feeding 9-11% ammonia bulk unit-ton 5.00 - —
Chicago, bulk unit-ton 6.00 - —
Tapioca flour Brazilian bgs ex whse lb .12 - .13½
Tar acid oil, 15-18%, dms., c.l., frt. equald gal .47 - .49
l.c.l. same basis gal .50 - .51
tanks, same basis gal .39 - —
25-28%, dms., c.l., same basis, gal .54 - .56
l.c.l. same basis gal .57 - .58
tanks, same basis gal .46 - —
50-53%, dms., c.l., same basis, gal .70 - .72½
l.c.l. same basis gal .73½ - .74½
tanks, same basis gal .62½ - —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate)
Terpine glycol ether dms., c.l., works lb .23½ - —
l.c.l. works lb .25½ - —
tanks, works lb .22 - —
Hydrate, NF, cryst., powd., 100-lb fib. dms lb .70 - —
Terpineol, dms., l.c.l., dlvd E lb .23¾ - —
extra, dms lb .41 - .60
prime, dms lb .30 - .45
Terpinyl acetate extra cns. dms. lb .60 - .75
prime, dms lb .55 - .70
Propionate, dms lb 1.75 - 2.00
Terra alba (see Gypsum)
Testosterone USP 100-gm. lots, bots gram .70 - —
Propionate USP 100-gm. lots, bots gram .68 - —
Tetrachloroethane dms. works lb 14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works lb .20½ - .21½
smaller dms., works lb .23½ - .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb .61½ - —
l.c.l., dlvd E lb .62½ - —
Pyrophosphate, 40%, cns., dms., frt. equald lb .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb .49 - —
l.c.l., dlvd E lb .50 - —
tanks, dlvd. E lb .47 - —
Tetrahydrofuran, dms., c.l., or t.l., works lb .36½ - —
l.c.l. or l.t.l., works lb .37 - —
tanks, works lb .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal dlvd lb 12.50 - 15.00
Sulfate 99% bots dlvd lb 8.00 - 13.00
Theobromine, NF, fib. dms lb 4.50 - —
And sodium acetate USP fib dms lb 4.75 - —
Sodio-Salyicylate, NF, fib. dms lb 3.90 - —
Theophylline, anhyd., or USP., 100-lb. dms lb 3.65 - —
Thiamine hydrochloride, USP, regular, fib dms kilo 60.00 - —
ampule grade, fib dms kilo 62.00 - —
Mononitrate, USP fib dms kilo 62 00 - —
Thiocarbanilide dms. ton lots lb 72 - —
less ton lots lb .74 - —
Thiodiphenylamine (see Phenothiazine)
Thiourea, tech., bgs., t.l., frt. alld. lb .33 - —
l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more. works lb 3.50 - —
dl-Threonine bots. 1-kilo lots. kilo 450.00 - 500.00
Thymol, fib. dms lb 2.50 - 2.75
Iodide, NF, dms lb 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (straits) lb. 1.03¼ - —
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk-resistant, bgs. c.l., dlvd lb .24½ - —
l.c.l., dlvd. lb .25½ - —
ceramic, bgs., c.l., dlvd. lb .22½ - —
l.c.l., dlvd. lb .23½ - —
reg., bgs., c.l., dlvd lb .22½ - —
l.c.l., dlvd lb. .20½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton 120 00 - —
Niagara Falls, N Y c.l., ton 137.50 - —
5-ton lots ton 142.50 - —
ton lots ton 147 50 - —
rutile nonchalking, bgs., c.l., dlvd. E lb .26½ - —
l.c.l. dlvd E lb 27½ - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Hydride, cns., works lb 7.95 - 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼ - —
l.c.l., works lb 09¾ - —
high-tinting, dms. c.l lb 09 - —
l.c.l. lb 09½ - —
Tetrachloride tech., dms., c.l., works lb. .26 - —
l.c.l., works lb. .27½ - .29
tanks, works lb. .20 - —

dl-a-Tocopherol, bots kilo. 134.20 - —
Acetate, bots kilo. 122.00 - —
25% dry, powd., bots kilo. 30.50 - 32.00
Acid succinate kilo. 165.00 - —
o-Tolidine, base, paste, kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride, paste, kgs., 100% basis lb 1.35 - —
Tolu balsam, cns lb. 4.85 - —
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. 70 - —
m-Toluidine, dms., c.l., works, frt. alld lb 79 - —
l.c.l., same basis lb. .80 - —
tanks, same basis lb. 78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. 23 - —
l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid dms. frt. alld lb .60 - .61
Toluol, coaltar, indust or nitration, tanks, works:—
Bethlehem, Pa gal 32 - —
Birmingham dist gal 32 - —
Chicago, dist gal 32 - —
Cleveland dist gal 32 - —
Geneva, Utah gal 26 - —
Johnstown, Pa gal 32 - —
Lackawanna, N. Y gal 32 - —
Lone Star, Tex gal 33 - —
Lorain Ohio gal 32 - —
Middletown, Ohio gal 33½ - —
Minnequa, Colo. gal 32 - —
Philadelphia dist gal 32 - —
Pittsburgh dist gal 32 - —
Sparrows Point, Md gal 32 - —
Terre Haute Ind gal 35 - —
Youngstown Ohio gal 32 - —

Toluol, petroleum, indust., 2°, tanks, works:—Albany, N. Y gal .35 - —
Bayonne, N. J gal .34 - —
Baytown Tex gal .33 - —
Chicago, Ill gal .35 - —
Detroit, Mich gal .35 - —
Houston, Tex gal .33 - —
Philadelphia, Pa gal .34 - —
Providence R. I. gal .35 - —
Wood River, Ill gal .34 - —
2,4-Tolylenediamine cryst., fib. dms., c.l. frt. alld lb .97 - —
l.c.l., frt. alld lb. 1.00 - —
powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. lots, cns oz. .42 - —
Toxaphene, dms. c.l., t.l., works lb. .22 - —
l.c.l., l.t.l., works lb. .28 - —
Triacetin, dms., c.l., dlvd. E of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret, dms. c.l. frt alld E of Denver lb. .42½ - —
l.c.l. frt alld E of Denver. lb. .43½ - —
tanks frt alld E of Denver. lb. .40 - —
Phosphate, dms., c.l., works lb. .52½ - —
l.c.l., same basis lb. .53½ - —
tanks, same basis lb. .50 - —

Tributylamine, dms., c.l., works lb. .67½ - —
l.c.l., same basis lb. .68½ - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., frt. alld. E lb .14½ - —
l.c.l. frt alld E lb 15½ - —
tanks, frt alld E lb 13 - —
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ - —
l.c.l., dlvd. E. lb .14½ - —
tanks, works, frt. equald lb. .11¼ - —
1,1,1-Trichloroethane dms., c.l., works lb .13½ - —
l.c.l., works lb. .14¼ - .16¼
tanks, works lb .11½ - .12½
Tricholine citrate 85% soln., ret. cbys. works frt adjusted lb 1.40 - 1.45
Tricresyl phosphate coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .36 - —
tanks, dlvd lb. .32½ - —
petroleum, dms., c.l., dlvd lb. .34½ - —
l.c.l., dlvd lb. .35½ - —
tanks, dlvd lb. .32½ - —
Triethanolamine dms., c.l., dlvd. E lb. .24½ - —
l.c.l., same basis lb. .25½ - —
tanks, same basis lb .22 - —
Triethylamine dms. c.l., works, dlvd E lb. .49 - —
tanks, same basis lb. .46½ - —
Triethyl citrate, refd., tech., non-ret dms. c.l. frt. alld E. of Denver lb. 45¾ - —

look...
it's
TITANOX*

In trade sales products—particularly flat wall paints—only the composite TITANOX pigments give the best paint properties at *minimum titanium dioxide content.*

These rutile-calcium pigments—TITANOX-RCHT (30% TiO_2) and TITANOX-C-50 (50% TiO_2) are first choice for flats, semi-glosses and other more highly pigmented finishes.

Titanium Pigment Corporation (subsidiary of National Lead Company), 111 Broadway, New York 6, N. Y.; Atlanta 5; Boston 6; Chicago 3; Cleveland 15; Houston 2; Los Angeles 22; Philadelphia 3; Pittsburgh 12; Portland 14, Ore.; San Francisco 7. In Canada: Canadian Titanium Pigments Limited, Montreal 2; Toronto 1.

*TITANOX is a registered trademark for titanium pigments sold by Titanium Pigment Corporation.

1350-B

Triethyl citrate, refd., tech., non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .46¾- —
tanks frt alld E of Denver lb. .43¾- —
Phosphate, dms., c.l. dlvd lb. 41½- —
l.c.l. dlvd lb. .41 - —
tanks, dlvd lb. .38 - —
Triethylene glycol dms. c.l. dlvd. E lb 21 —
l.c.l., dlvd., E lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd E lb. .51½- —
t.c.l., dlvd E lb. .52½- —
tanks, dlvd E lb 49 —
Tri-isopropanolamine dms. c.l., dlvd E lb 23¼- —
t.c.l. dlvd E lb 24¼- —
tanks dlvd E lb 20¾- —
Trimethylamine 25-40% soln. dms., c.l. works frt equald., 100% basis lb 42 —
t.c.l. works frt equald. 100% basis lb 42½- —
tanks works frt equald 100% basis lb 33 —
Trioxane, pure, dms., c.l., t.l., works lb. .50 - —
t.c.l., works lb. .51½- —
Tripentaerythritol bgs. t.c.l. works lb .35 —
Triphenyl phosphate obls. c.l., frt equald lb 40 - —
t.c.l., frt equald lb .41 - —
Triphenylguanidine bbls. works lb 90 —
tanks, same basis lb 18½- —
Tripropylene glycol dms. c.l., frt. alld E lb 20½- —
t.c.l. frt. alld. E lb .21½ —
Tripopylene glycol prices 1c. per lb higher in West.
Phosphate (see Sodium phosphate tribasic)
Tyrothricin, USP, bots ..... grams. .55 - .58
dl-Tryptophane fib ctns. works kilo 165.00 —
Tungsten metal powd. 2-5 microns dms., works lb. 4.20 - —
Turpentine, gum (see Protective Coatings market, Naval Stores)

U

Unicorn root, false (see Helonias root)
True (see Aletris root)
Urea 46% N indust., bgs., c.l. t.l. dlvd E ton 120.00 —
t.c.l. dlvd E, ex whse ton 140.00 —
45% N agricultural bgs. c.l. (30 tons) dlvd E ton 105.00 —
Urea-ammonia liquor A and B grades N basis, tankcars, Belle W. Va. ton 126.00 —
C grade, tankcars, same basis ton 124.50 - —
37 grade, tankcars, same basis ton 153.00 —
Urethane USP dms lb 1.45 —
Uva-ursi leaves bls lb 12 14

V

Valerian root, Belgian, bgs ..... lb .35 —
Indian, bgs. lb .27 —
dl-Valine dms. works lb 21.00 27.50
Valonia beards 40-42% tannin, bgs. ex dock ton 86.00 —
cups 28-30% tannin bgs. ex dock ton 64.00 - —
extract powd. 63% tannin bgs. exdock, duty extra lb. 09¾- —
Vanadium pentoxide tech dms. works lb .25 - .35
Vanilla beans, Bourbon, tins ... lb. 8.50 - 9.00
Mexican, cuts, tins ..... lb. 7.50 - 7.75
whole, tins ..... lb. 8.25 - 8.50
Tahiti cs lb 7.00 —
Vanillin ex eugenol tins 25-lb lots lb 6.50 6.75
smaller lots lb 6.90 7.25
ex lignin dms. 100-lb lots lb 2.75 —
smaller lots lb 2.80 2.85
Vinyl acetate monomer, 55 gal. dms. c.l., works lb .19 - —
t.c.l., works lb .20 - —
tankcars, works lb .16½- —
tanktrucks less than 4,000 gal., works lb .17½- —
n-Butyl ether, tech., dms., l.c.l., works lb. .35 - —
Chloride monomer tanks works lb 11 .12
Ether, USP, anesthesia, bots., 50 c.c. hospitals ... bot 1.12 - —
75 c.c. bot 1.56 - —
tech. dms. c.l. works lb .26 - —
l.c.l. works lb .28 - —
tanks works lb .25 - —
Ethyl ether, tech., dms., works, lb. .30 - —
Isobutyl ether, tech., dms., l.c.l., works lb. .35 - —
Methyl ether, cyls., works ... lb. .30 - —

Cylinders are sold outright or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made

Propionate monomer dms. c.l. dlvd lb .49 - —
t.c.l. same basis lb .50 - —
tanks, same basis lb 47 - —
Trichloride (see Trichloroethane)
2-Vinylpyridine 10 dms to tanks, works lb 1.36 - —
1 to 9 dms. works lb 1.50 - —
tanks, works lb 1.33 - —
Vinyltoluene, dms., c.l., frt. alld lb 18½- —
l.c.l., frt. alld. lb 19½- —
tanks frt alld lb 16 —
Viostero, in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots. lots of 10 billion USP units 1,000,000 units .02½- .04¾
Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram gram .07¼ —
dry 500,000 units per gram, kilo lots kilo 67.50 - —
325,000 units per gram same basis kilo 43.88 - —
250,000 units per gram same basis kilo 33.75 —

Dry vitamin A acetate in less than kilo lots $2.50 per kilo higher in all potencies

liq. in oil, 1,000,000 A units per gram 1,000,000 units 10 - —
palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units 10 - —
in oil 1,000,000 A units per gram 1,000,000 units 10 - —
Vitamin B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin)
and Yeast)
B_{12} crystalline, 1-gram or 5-gram vials gram 245.00 - —
oral grade solids in containers of 1 and 5 grams of B_{12} activity gram 185.00 - —
C (see Acid ascorbic)
D (see Oils codliver and fish-liver Calciferol and Viosterol)
D_2, dry 850,000 units per gram kilo lots kilo 42.50 - —
less than kilo lots kilo 45.00 - —
E (see a-Tocopherol and Oil wheat germ)
G (see Riboflavin)
H (see Biotin)
K Active (see Menadione)
K_1 25 gram bots gram 4.50 —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha)

W

Wahoo root bark bls lb 2.25 —
dlvd lb 1.95 —
25-49-lb lots N. Y. or Chicago lb 2.05 - —
5-24-lb lots cns. N. Y. or Chicago lb 2.15 —
Wattle bark, fair average, African, bls., ex dock ton 95.00 -96.00
merchantable, bls., ex dock ton 91.00 -92.00
extract, liq., 35% tannin, bbls lb. .08¼- .08½
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .0915- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .0930- —
Warfarin 0.5% dms 50-lb lots dlvd lb. 1.95 - —
25-49 lb. lots, N. Y. or Chicago lb. 2.05 - —
5-24 lb. lots, cns., N. Y. or Chicago lb. 2.15 - —
Wax, amorph. (see Wax microcrystalline)
Bayberry bgs lb 45 - 47
Bees, crude, African, bgs... lb. .69 - —
Brazilian, bgs ..... lb. .71 Nom.
Central American, bgs ... lb. .68 Nom.
Chilean, bgs ..... lb. .71 Nom.
refd. USP, bleached white bricks, 100-lb ctns lb. .80 - 82
slabs, 100-lb ctns lb. .79 - 81
yellow, bricks, 100-lbs. ctns lb. .71 - 73
slabs, 100-lb ctns lb. .70 - 72
Candelilla, crude, bgs ..... lb. .65 - .67
refd., bgs ..... lb. .68 - .70
Powdered candelilla: 20 to 100 mesh, 7c higher.
Carnauba, chalky, bgs., ton lots, lots lb. .65 - .66
North country No. 2, crude bgs. ton lots lb. .73 Nom
No. 3, Ceara, crude bgs., ton lots lb. .65 - .66
refd. pure bgs., ton lots lb. .74 - .75
tech., bgs., ton lots lb. .65 - .67
Parnahyba crude bgs. ton lots lb. .67 - .69
refd. pure bgs., ton lots lb. .75 - .76
yellow, No. 1, Ceara, bgs., ton lots lb. 1.37 - 1.39
Parnahyba bgs., ton lots lb. 1.39 - 1.41
Powdered carnauba wax price same as powdered candelilla differential
Japan, cs ..... lb. .43 - .44
Microcrystalline, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Montan, dom., refd., bgs. lb. .29 - .30
imp., crude, Bohemian, bgs lb. .26 - .28
German, bgs ..... lb. .35 Nom
Ouricury, refd., pure, bgs ..... lb. .85 - .86
tech., bgs ..... lb. .80 - .82
Paraffin (see P).
Spermaceti, blocks, cs ..... lb. .30 - .33
cakes cs lb .31 .34
Sugar cane, dom., refd., slabs, 80 lbs ctns. works lb .65 - .75
spot lb 67¼ 72¼
White lead (see Lead White)
White pine bark, rossed bls lb. 18 .19
White precipitate USP powd. dms., lb 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb .20 - —
rossed, bls lb .21 - —
Witch hazel, bark bls lb .16 - .17
leaves, bls lb .27 - —
Wollastonite fine bgs. c.l. works ton 39.50 - —
t.c.l. ex whse ton 56.00 - —
medium bgs c.l., works ton 27.00 - —
l.c.l. ex whse ton 44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin)
Wormseed, American bgs. ... lb .20 .25
Levant, bgs ..... lb. 4.25 4.50
45°-47°C. dms. c.l. same basis

X

Xylene (see Xylol)
Xylenol cryst. 58°-60°C., m.p., dms., l.c.l. works lb. .40 —
56°-58°C. dms. l.c.l. works, frt. equald lb. .30 —
45-47°C., same basis ..... lb. .212 - —
t.c.l. same basis ..... lb. .215 - —
tanks, same basis lb 199 - —
fraction, b.r., 7°-9°C., dry above 227°C. dms., c.l., same basis gal. .96 - —
t.c.l. same basis gal. .99 - —
tanks same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
t.c.l. same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, o-m-p, dms., c.l. or t.l. works lb. .39 - —
t.c.l. same basis lb .40 - —
tanks, same basis lb .38 - —
Xylol, coaltar, indust. tanks works:—
Bethlehem Pa gal. .34 - —
Birmingham dist .... gal. .32 - —
Chicago dist ..... gal. .35 - —
Cleveland dist ..... gal. 34½- —
Geneva, Utah ..... gal. .29 - —
Johnstown Pa. ..... gal .33 - —
Lackawanna N. Y. gal .35 - —
Lone Star, Tex. gal .33 - —
Lorain, Ohio gal .33 - —
Middletown, Ohio gal .34 - —
Minnequa, Colo. gal .34 - —
Philadelphia dist ... gal .34 - —
Pittsburgh dist ... gal .32 - —
Sparrows Point, Md gal .34 - —
Terre Haute, Ind gal .35 - —
Youngstown, Ohio gal. 32½- —
Xylol petroleum, indust., tanks, works:—
Bayonne, N. J. ..... gal .34 - —
Baytown, Tex. ..... gal .33 - —
Chicago, Ill. ..... gal .35 - —
Houston, Tex. ..... gal .33 - —
Philadelphia, Pa. ... gal .34 - —
Providence, R. I. ... gal .35 - —
Wood River, Ill. ... gal .35 - —

Y

Yara, vara, cns. lb 2.15 2.65
Yeast, brewer's, dry USP, 50 int'l B units per gram, 100-lb. dms lb. 47 —
90 int'l B units per gram, 100-lb dms lb 52 —
200 int'l B units per gram, 100-lb. dms lb. .58 - —
300 int'l B units per gram, 100-lb dms lb 60 —
debittered, USP Saccharomyces dlvd lb .27 - —
Torula, USP dlvd lb .18 - —
Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —

Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below

Benzidine, AAA, bbls., dlvd lb. 2.20 - —
AAOT, bbls., dlvd ..... lb. 2.45 - —
Lightfast, bbls., dlvd ..... lb. 3.25 - —
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies lb 2.85 - —
Selenide lithopone, all shades, bbls., frt alld E of Rockies lb. 1.15 - —

Cadmium yellows, Los Angeles and San Francisco, ex whse, 1c per lb higher

Chrome, CP, bbls. dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —

Dlvd. Ala., Fla., Ga., La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c higher, Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Hansa, 10 g., bbls., same basis as yellow, crome lb. 2.35 - —
G pigment, bbls lb 2.20 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .06 - —
Peruvian type bgs. t.c.l lb. .0205- 0345
pure bgs., c.l. works lb. 11½ —
t.c.l. works lb. 11¾- —
Mercury oxide, bbls., 1,000-lb. lots. lb 5.58 - —
smaller lots lb 5.60 —
Ocher (see Yellow, iron oxide, natural)
Zinc (chromate), bbls., dlvd... lb. .29 - —
basic, bbls., dlvd ..... lb. .34 - —
Yerba santa leaves, bls ..... lb. .40 .42
Yohimbine hydrochloride, bots, tins. oz. 3.75 4.25

Z

Zein, bgs. 36,000-lb. lots or more lb .38 - —
1,000 to 36,000 lb lots, works lb .40 - —
smaller lots, works lb .43 - —
Zinc acetate NF VIII dms ... lb .53 —
tech., dms., works ..... lb. .29½- .29¾
Borate, bgs., c.l., dlvd E .... lb 192 —
t.c.l. dlvd E lb 202 —
Chloride, NF, gran., dms... lb. .42 - —
precip., powd., dms. ... lb .26 - —
soln. 50% dms. c.l. works 100 lbs 5.80 - —
t.c.l., works ..... 100 lbs 6.40 - —
tanks, works ..... 100 lbs 5.15 - —
tech., fused, dms., c.l., works. 100 lbs. 10.70 - —
t.c.l., works ..... 100 lbs. 11.20 - —
gran. fib dms., c.l., works 100 lbs. 11.45 - —
t.c.l., works ... 100 lbs. 11.95 - —
Chromate (see Yellow, zinc).
Cyanide, kgs. 1,000-lb lots or more works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works lb .17½- —
t.c.l. works lb .18½- —
Fluoride, bbls., works ..... lb. .49 - .50
Hydrosulfite, dms., c.l., frt. alld. lb. .22 - —
t.c.l., frt. alld ..... lb. .24 - —
Metal, prime western, slabs, E. St. Louis lb. .13½- —
New York lb. .14 —
Naphthenate, liq., 8% Zn., dms., frt. Alld lb. .24½- —
10% Zn dms. frt. alld lb. .30 - —
Nitrate, tech., cryst., bbls., works. lb .20 - —
Oxide, pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½- —
t.c.l. same basis lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. alld lb. .15½- —
t.c.l. same basis lb. .16½- —
50%, bgs., c.l., same basis lb. .15⅞- —
t.c.l., same basis lb. .16⅞- —
French process, coml., green seal, bgs., c.l., frt. alld lb. .15¾- —
t.c.l., same basis lb. .16¾- —
red seal, bgs., c.l., same basis lb. .15¼- —
t.c.l. same basis lb. .16¼- —
white seal, bgs., c.l., same basis lb. .16¼- —
t.c.l., same basis lb. .17¼- —
USP, ctns., c.l., frt. alld. ... lb. .17¼- —
t.c.l., same basis lb. .18¼- —

Zinc oxide Pac. Coast prices 1c. higher.

Phenolsulfonate, NF, gran., dms. lb. .43 - .44
powd., dms ..... lb. .46 - .53
Resinate, precip., 7.2-7.6% Zn., dms., frt. alld. lb. .29 - —
Silicofluoride, dms., works ... lb. .12½- .14
Stearate, tech., USP, ctns., c.l. lb. .41 - —
t.c.l. ..... lb. .42 - .46
Sulfate, powd., monohydrate, 36% Zn, bgs. c.l. dlvd E 100 lbs 8.75 - —
t.c.l., dlvd E 100 lbs 9.75 - —
Zinc sulfate in bbls 40c higher.
USP gran dms lb 26 - —
Sulfide, pure, bgs., c.l., dlvd lb 2530- —
Undecylenate, dms ..... lb. 2.00 - —
Yellow (see Yellow, zinc).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works ..... 100 lbs. 10.85 - —
t.c.l., works ..... 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l. lb. .25¼- —
t.c.l. ..... lb. .26 - —
Zircon (G) gran., bgs., c.l., works. lb. .03½- —
5 tons to c.l., works lb. .03¾- —
1 ton to 9,999-lb lots, works. lb. .04 —
smaller lots, works lb. .06½- —
milled, bgs., c.l., works .... lb. .04½- —
5 tons to c.l., works lb. .04⅝- —
1 ton to 9,999-lb lots works. lb .04¾- —
500-1,999-lb lots, works lb .07½- —
Zircon (G) in barrels 1c higher
Zirconium acetate, 13% com., ZrO_2 c.l. 30,000 lbs. minimum, works lb 23 —
Hydride, cns., works ..... lb. 7.00 8.45
Nitrate, dms., ex whse ..... lb. 4.50 7.00
Oxide 92½-99%, white grd., bbls. or bgs. works lb. 1.50 —
lump, electric-fused, bgs., lump, electric-fused, bgs., c.l., works lb. .44 —
5-ton lots, works lb. 44½- —
1 ton to 9,999-lb lots, lbs. works lb 45 - —
CP, white grd. bbls. or bgs., works lb. 1.50 - —
lump, electric fused, bags, 500 to 1,999-lb lots, works lb. .45½- —
smaller lots works. lb. 48 - —
milled, electric-fused, bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½- —
1 ton to 9,999-lb lots, works lb. .60 —
500 to 1,999-lb lots, works lb. .60½- —
smaller lots, works. lb. .63 - —
Oxychloride, cryst., ctns., 5-ton lots, works lb. .35½- —

Durez Entering

—Continued from page 5

pose phenolics. They have excellent shelf life and can be handled in existing phenolic dies and molding equipment. Molding characteristics are excellent, according to Hooker.

The Durez products are sold in fine granular form as dry powders rather than in large chunks or as pasty semi-solids, as is true of other polyesters. Consequently, molders are better able to handle the Durez granular form in conventional commercial equipment, according to the producer.

Entry into the field of light-colored molding compounds has broad implications for Durez since, aside from its "Hetron" polyester resins, which have entirely different end-uses, and its diallylphthalates introduced recently, the Durez Division has specialized heretofore in producing phenolic resins and phenolic molding compounds exclusively since the company's inception in 1921.

Broader Application Range

The new polyesters are significant in that, although they will find many uses similar to the present phenolic molding compounds, the range of application will be materially broadened and they will compete favorably with currently popular light-colored plastics of other types, Hooker said. The number of new uses for plastics will also be extended because of their particular advantages. While the new compounds will replace dark-colored phenolics to a minor extent, Hooker anticipates a substantial net gain in plastics production and sales. For example, an electric iron might have a black handle molded of phenolic compound for a standard model, but the deluxe model might use a more expensive turquoise handle molded of the new material. Polyester molding compounds are higher priced than phenolics and range from 42 to 77 cents per pound, depending on quantity purchased.

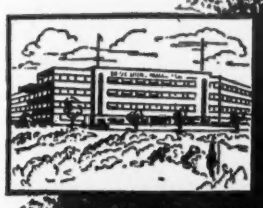
The new polyesters differ materially from "Hetron," Hooker's other fire-resistant polyester. "Hetron" is sold as a liquid resin to fabricators who reinforce it with fiber glass, molding or laminating it into fire-resistant translucent corrugated building panels, skylights, boats, vehicle body parts, corrosion-resistant chemical duct work, ventilating fan housings, etc.

The special fields where "Hetron" is used differ from those of the new general-purpose molding compounds which are not translucent and do not use glass fibers for reinforcement. Instead they use fillers which are less expensive and more conventional in the molding compound field, Hooker said.

Designed along utilitarian lines by the Hooker engineering staff, the rectangular building, located in the northeast corner of the Durez property, will contain four floors with no basement, and is being built by Siegfried Construction Company, Buffalo, N. Y. The additional labor force to be required, although not large, has not yet been determined.

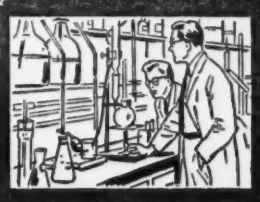
The building of the new resin plant, as well as an almost half-million dollar laboratory for products application and some other research, to be occupied in April, represents renewed emphasis on North Tonawanda as a site for major expansions. In the summer of 1955, Durez put into successful operation a highly-automated $5 million phenolic molding compounds plant at Kenton, Ohio.

What's BEHIND THE MOST COMPLETE VITAMIN LINE IN THE FIELD?



Sterwin RESEARCH

Sterwin's vitamin research is done at the Sterling-Winthrop Research Institute (above) where scientists work constantly to improve existing products and create new products and formulations.



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THIAMINE HYDROCHLORIDE
(REGULAR AND AMPULE GRADES)
THIAMINE MONONITRATE

•

RIBOFLAVIN

•

PYRIDOXINE HYDROCHLORIDE

•

***VITAMIN B_{12} CRYSTALLINE**
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VITAMIN B_{12} ORAL GRADE
VITAMIN B_{12} SOLUBLE GRADE

•

ASCORBIC ACID
(AVAILABLE IN SIX GRANULATIONS, ALSO IN COATED AND AMPULE FORMS)

•

D CALCIUM PANTOTHENATE
DL CALCIUM PANTOTHENATE

•

ALPHA TOCOPHEROL
ALPHA TOCOPHEROL ACETATE

•

NIACIN
NIACINAMIDE

•

VITAMIN D_2 CRYSTALLINE
(CALCIFEROL)
VITAMIN D_3 CRYSTALLINE
(BOTH AVAILABLE IN OIL SOLUTIONS)

*We'll be happy to send you a copy of Sterwin Technical Topics #201. It digests available information on various forms of Vitamin B_{12}. Write or phone your request.

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Problems in Political Economy

Theoretically, political economy is considered a science. Practically, it is almost anything but that. The recently presented federal budget plan for the coming fiscal year testifies fully to that conclusion. A deal of economic science of some sort was devoted to its construction; but, the fitting of its incomings and outgoings to the conditions of reality is left wholly to politicians with little, if any, qualification in any scientific sense.

There is, therefore, nothing unusual about the nature, number, or variety of the approaches already being given some sort of attention by those upon whom the task of that fitting has fallen. There is nothing unusual about the nature, number, or variety of the goals toward which those approaches are being directed. The fitting will all add up to the doing of as much as can be got away with for those who want something done for them on a sort of reciprocal pattern, and getting as much as can be got from those who always have to pay for all such givings.

There is some possibility, even a trace of probability, that the gigantic budget plan will be pared down to an actuality at least a little closer in keeping with what is really needed for the greatest good of this nation and its people as a whole. Even so, there is less reason to expect that there will be a commensurate reducing of the contributions levied upon the people as a whole and collected more or less equitably from the most of them. The construction and adoption of a scientific scheme of federal taxation has been a markedly laggard project—even as a phase of political economy—for several decades.

Of course, there is going to be some changing of the existing tax scheme. The politicians are busy—unscientifically—with a project of many ramifications in that direction. They are, as usual, getting very much advice on how to ease the burden of the adviser. A bit more of their own volition, the not scientific taxmakers are concerning themselves with changes in the area of excise taxes, apparently more in respect of administration than of imposition.

The proposal to shift the levying of the "emergency" tax on toilet preparations from the retailer to the manufacturer is in point. The burden of the tax will still fall upon the consumer, and probably more heavily because the manufacturer would be authorized to add the consequent additional cost to his price to a distributor, who, of course, would pass his additional cost along to the consumer—with perhaps the inclusion of the increase in percentage profit in both transactions.

Oh, yes; it will, as the proposer of the change in the toilet preparations tax scheme opines, be easier for the government to administer the tax under his version, and it could also be cheaper—but not for the payer of the tax.

There is an evident trend among those who pay income taxes at the production level to promote the extension of excise taxes as a source of federal revenue. It is not enough that they can pass along to the consumer more or less of their tax costs. They want also to get rid of their share in the task of tax administration. In terms of scientific political economy, any excise or sales tax is inequitable. It should have no place in the policies or practices of a true democracy.

Europe's Chemical Position

To understand reports, estimates, or guesses with reference to commercial economic conditions or outlooks, it is necessary to have a goodly measure of exact knowledge of the terminology involved. Applied semantics is a variable and greatly varied practice. It is seldom that any two commenters will be in agreement on whether an economic development on which they feel compelled to say something is an expansion, an advance, or a progress. Each has his own pet terms, and few, if any, of those involve any distinction in meaning among the three mentioned in the preceding sentence. And seldom, if ever, is there any way in which one who hears or sees any of those terms can confidently assume on what criterion they were based.

It follows, therefore, that, to get a reliable picture of any economic condition, it must be viewed from several angles by several sets of eyes. That conclusion can be drawn quite reasonably from data in the recently published report of the third study in chemical industrial areas by the Chemical Products Committee of the Organization for European Economic Cooperation, which have it that expansion (increase in production) of the chemical industry in Europe was up 11.5 percent in 1955, compared with 1954, and dropped to 6 percent in the first half of 1956, compared with the corresponding period in 1955. Comparable data for the industry in the United States show an advance of 13 percent in 1955 and one of 10 percent in the first half of 1956. It is to be noted, however, that in some divisions of the industry in Europe, including soap, superphosphates, and dyestuffs, not all of the available productive capacity was used over the year and a half.

In any comparison of operative or associated trends in the chemical industry in this country and in Europe, due regard must be had for the low level to which the latter had been pushed during World War II. On the other hand, consideration must be given to the still hampering shortage in Europe of essential personnel, ranging all the way from skilled labor to properly qualified technical and scientific workers. According to the report of the OEEC committee, the inadequacy of specially trained staffs is of grave concern in the industry. But, there is more than a little reason, deriving from widely spread contributions, to believe that the chemical industry in Europe has advanced (gone forward) scientifically and technically farther than it has productively. One of the reasons for that advance lies in an advantage which it has over the industry in this country in connection with the conducting of basic, more or less "pure" research in teaching institutions under cooperative programs. The IG's and similar monopolistic combinations or trusts are in position to propose and promote such research with an assurance of profit directly from the results and by way of their licensing in more competitive countries. It is to be assumed that the latter practice will do much to offset the financial effects reported to be expected from the European industry's present shortage of special personnel and of funds on its competitive position in world markets.

Cultivating Essential Relations

Although it officially, or at least formally, has the general, somewhat overbroad entitlement, "Institute of Industrial Relations," the meeting which the National Association of Manufacturers will sponsor in Hollywood, Florida, four weeks hence, will have one phase that is of special, timely importance. That will be the consideration given to "crucial management - labor relations." There will, of course, be more than a little of use and benefit to be got from each of the more than forty separate sessions which will be conducted by "nationally prominent specialists in the field of industrial relations." But, employment relations today present the biggest need in that direction. It will be well—yes, wise—if there is included among the nationally prominent specialists who will conduct sessions, a properly selected representation of those who really know something—and are not in any way averse to telling it—about employment relations from both sides.

The NAM policy and position with reference to employment relations are expected to have a test at the coming institute. At least, it has been reported publicly that the association will make a decision with reference to following a course similar to that taken by the Chamber of Commerce of the United States a fortnight ago in again nominating delegates to the International Labor Organization. Through some confusing of at least words, the report of that action had the chamber joining with the manufacturers' association in nominating delegates to the UN labor organization. There has been no evidence that either of the national business groups has any intention of seeking to be represented in any way in any sessions of the national labor organization—or vice versa. Some such collaboration could and doubtless would present more than a little potentiality in the direction of beneficial and desirable policies and practices in employment relations.

Employment relations are human relations. As such, they are fundamentally and extensively affected by that abstruse factor, the personal equation. In recognition of that fact, the National Council of Industrial Management Clubs has for some time been sponsoring through its regional chapters conferences directed toward practical methods of bringing workers and management into closer human relationship. It has done a deal of good on various aspects of understanding in employment relations. Its endeavors are another project in which the national organizations of top management should be earnest, serious participants. Personality is a useful attribute. Its desirability depends primarily upon its compatability—a characteristic which must be developed by way of properly directed association.

Washington Talks It Over

Congress Is Opposed to Too Many Overlapping Investigations, But Not Enough to Do Anything About It.

By Ralph L. Cherry
Chief, OPD Washington Bureau

A move to correct an evil that has been developing over the years on Capitol Hill hasn't been allowed even to get off the ground. This is an effort by some of the more conscientious members to save money for the taxpayers by ending a growing practice of two or more committees of congress running investigations into the same subject—sometimes simultaneously.

This practice, which is not only costly to the public, with a questionable return for the money and effort spent and often amounts to harrassment of the department or industry under investigation, has been deplored in every congress. Most members agree that it should be ended, but they can't agree on how it should be done. A perfect example of the problem is in the current Middle East oil situation. No less than three senate committees and one house committee are actively digging into it.

The rules committee of the house tried to do something to curb the overlapping inquiries by establishing a rule this session that when one committee has entered upon an investigation of a particular subject, other committees shall steer clear and give the first committee a clear field. As good as such a rule might sound, however, it didn't reckon with the jealous nature of congressional committees. None was willing to let another committee have the full say in any matter in which it too had an interest.

Probably the only way that the abuse can be stopped will be by cutting down the amount of money allotted to the committees for investigations. The costs of these inquiries have been rising year after year.

In 1940 such expenditures in the senate amounted to $170,268, but in fifteen years they rose to $2,118,331. Last year they increased to $3,007,428 and this year it is predicted they will go up another half a million to around $3.5 million.

With all that money appropriated just for investigations by one body of congress alone, there is bound to be overlapping, duplication and little if any coordination.

Guide for Marketing

Distributors and sellers of chemical industry products will find an important and useful guide in a new forty-page publication just released by the Commerce department. It seeks to give the "inside" on how to use a scientific marketing approach in today's highly competitive business climate, and provides some general procedures for establishing a planned scientific marketing program based on market facts and geographic market potentials.

This "how-to-do-it" market analysis aid, "Market Analysis Tools—County Business Patterns," describes practical methods for applying data from "County Business Patterns," a Census bureau compilation of material gathered by the Bureau of Old Age and Survivors Insurance. Much of this new study has been devoted to practical demonstrations of how the "County Business Patterns" data has been, or may be, applied by individual firms confronted with different types of marketing problems.

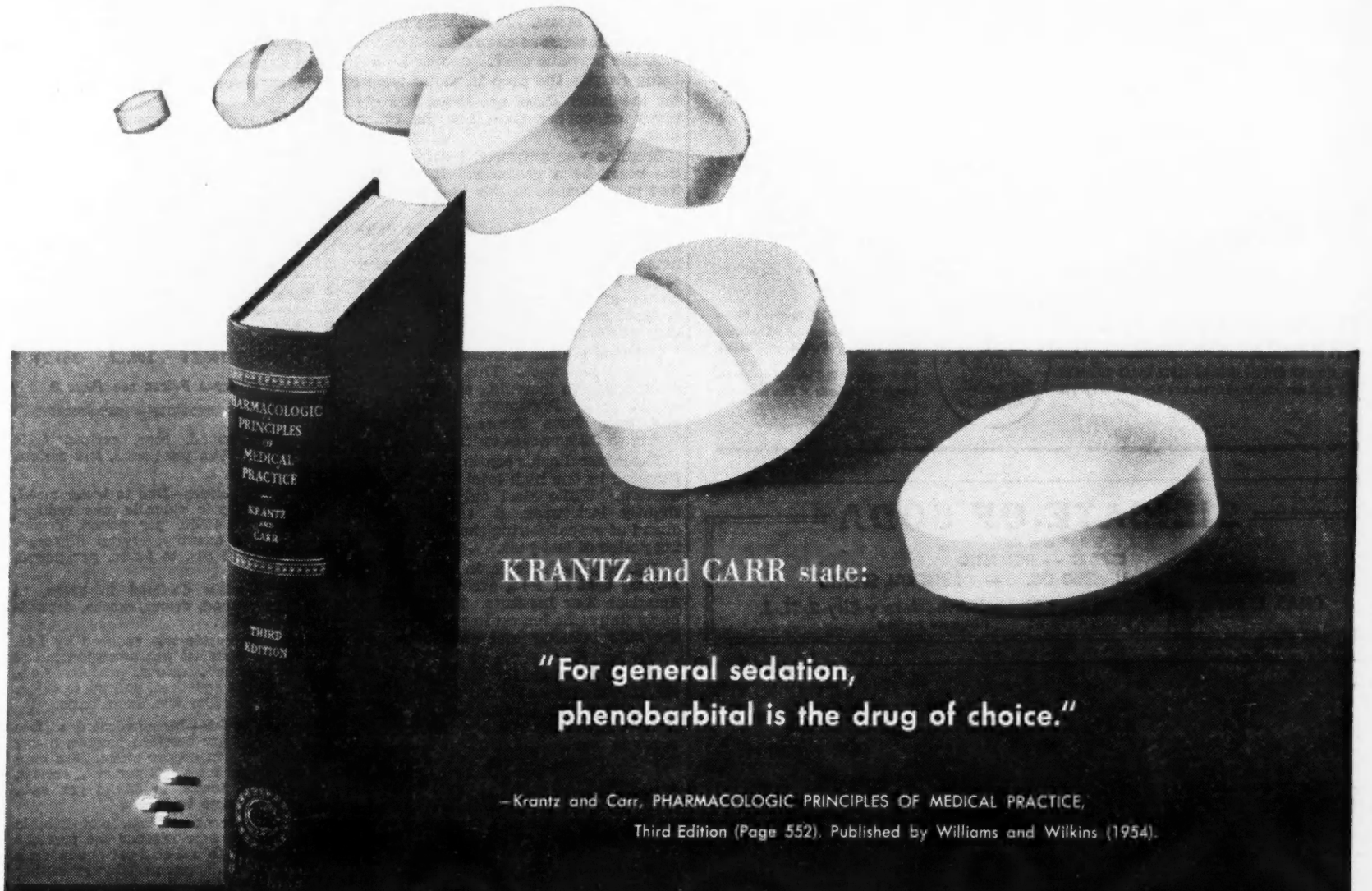
Secretary of Commerce Weeks calls attention to the fact that many of the successful business firms have been making good use of "County Business Patterns" and other basic government data in planning their production and marketing programs, but that there are still too many firms which have not yet discovered how profitably this material can be applied to their own operations. Copies of the booklet are obtainable from the Commerce department field offices.

The Prescription Business

Of about 420 million prescriptions filled in 1954 by 44,551 drugstores, 253 million were new prescriptions and 167 million were refills. These figures were gathered by the Census bureau in the 1954 census of business from drugstores whose total sales, including prescriptions, amounted to nearly $4.9 billion.

The 1954 census enumerated a total of 56,009 drugstores and proprietary stores, with sales totalling about $5.3 billion. Among these were 49,489 establishments with payrolls—the 44,551 drugstores for which prescription figures were reported and 4,938 proprietary stores. Sales of the proprietary stores with payrolls amounted to about $247 million.

Sales of 6,520 establishments without payrolls, both drug and proprietary, amounted to $148 million.



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Heavy Chemicals

More copper chemicals declined last week in the wake of a two cent reduction in primary metal. Lower were monohydrated copper sulfate, copper carbonate, cupric and cuprous chlorides. Tribasic, CP and crystal copper sulfate were lowered the previous week. Copper salts expected to remain unchanged for the time being despite the drop in metal were cyanide, oxychloride, and acetate. Prices for the latter three are based less directly on copper than are the other salts.

Bromine was advanced 1 cent across the board by a producer. It was the first price change in this halogen since last June.

Tone of the alkali market was definitely weak, considering present business in terms of late November and early December levels. There was plenty of soda ash and caustic soda around, and producers reported that they could easily book new business.

Chlorine appeared available for spot shipment last week. This position has gradually been loosening since the first of the year. Previously, the industry had run above theoretical capacity trying to fill contract orders.

The mineral acids continued to be influenced by the high level of steel production. While steel output declined slightly last week, it was still well ahead of output during the corresponding period of last year.

Consumption of zinc in 1957 should surpass that of 1956, according to the American Zinc Institute. The Institute bases its prediction on increased use in the auto industry and galvanizing.

The American Paper and Pulp Association reported production for the week ended February 2 at 97.0 percent of theoretical capacity, as compared with the revised figure of 97.0 percent for the previous week, and 102.9 percent for the corresponding week of last year.

Acid, Chromic—Demand was moderately active for use in plating. Producers felt that automotive industry inquiry had slackened to some extent.

Acid, Hydrochloric—Steel output continued strong, and was responsible for large volume movement of acid during the week. Other end uses were moderately active. Prices appeared fairly stable everywhere but in the New York metropolitan area, where there were continued reports of shading.

Acid, Phosphoric—Demand was only moderately active. Inquiry for use in various fertilizer preparations was not expected to pick up for several weeks. Prices were without change.

Acid, Sulfuric—Steel, rayon and chemical applications kept acid moving in good quantity during the week. Fertilizer inquiry was expected to pick up in the near future, particularly in the manufacture of superphosphate and ammonium sulfate.

Steel output last week declined to 96.6 percent of capacity, or an estimated 2,472,000 tons, from the previous week's 97.6 percent of capacity, or 2,498,000 tons, according to the American Iron and Steel Institute.

Actual production one year ago last week was 2,439,000 tons, or 99.1 percent of 1956 capacity. The record week for steel output was that of December 17, 1956, when 2,525,000 tons were produced.

Bromine—Prices for this halogen were lifted 1c. per pound across the board by a producer last week, effective immediately on spot and April 1 on contract.

Bromine was newly priced at 23½c. per pound, tankcars, delivered east of the Rockies; drums, 32c. per pound, carlots, same basis and 32c. to 34c. per pound, smaller lots, same basis; cases, 33c. per pound, carlots, and 35c. to 40c. per pound, less carlots, same basis, as to quantity.

Chlorine—The market was still nowhere near peak sales levels reached in November, when the industry had to run at 101 percent of capacity in order to supply consumers' needs.

Last week, producers reported that they were able to take on some new business, a situation which would have been impossible a few weeks previous.

Current business was fair, and indications were that demand was continuing to pick up slowly following the protracted holiday period at the year's end. February and March were expected to be good sales months.

Copper Carbonate—With the decline in metal, copper carbonate was reduced to 34¾c. per pound, bags, carlots, f.o.b. works, and 36¼c. per pound, less carlots, same basis.

Price Trends

Advanced

Bromine, 1c. per lb.
Tin, ¼c. per lb.

Reduced

Copper carbonate, 1c. per lb.
Chloride, cupric, anhyd., 1c. per lb.
cryst., dihydrate, ¾c. per lb.
dried, ¾c. per lb.
cuprous, 1.4c. per lb.
Sulfate, monohydrated, 75c. per cwt.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
103.84	103.84	103.87	101.20

For Current Prices see Page 9

Copper Chlorides—Due to lower metal, anhydrous cupric chloride was reduced to 44¼c. to 44¾c. per pound, drums, works, as to quantity; crystal dihydrate was quoted at 30c. to 30½c. per pound, same basis.

Dried crystals declined to 38¼c. to 38¾c. per pound, drums, works, depending on quantity.

Cuprous chloride was reduced by 1.4c. per pound. Material was newly quoted at 44c. per pound, drums, carlots, f.o.b. works, freight equalized, and up to 47½c. per pound, smaller lots, same basis.

Copper Sulfate—Monohydrated sulfate declined 75c. per hundred pounds, owing to the decline in copper metal. New quotations ranged from $23 per cwt., carlots, drums, f.o.b. works, to $23.75 per cwt., less carlots, same basis.

CP, 99 percent crystals, and tribasic copper sulfate were reduced the previous Friday, owing to a 2-cent-per-pound drop in the price of domestic producers' copper metal.

Ferric Sulfate—Prices for partly hydrated sulfate continued unchanged last week, at $33.25 per ton, bulk, boxcars or hopper cars, f.o.b. works; $35.25 per ton, bags, carlots, same basis, and $36.25 to $42.25 per ton, less carlots, same basis, depending on quantity. Last price change was January 1, when material advanced $1.50 per ton.

Lime—Prices in the metropolitan area were higher owing to the recent 7 percent increase in rail freight rates. Chemical (quicklime) was quoted at $20.82 per ton, bulk, carlots, metropolitan New York destination, freight equalized with the nearest competitive producing point.

Hydrated was listed at $22.32 per ton, carlots, same basis, and spray was lifted to $26.32 per ton, carlots, same basis.

Domestic sales of open market lime in October (851,808 tons) increased slightly over the previous month's output (789,241 tons), according to reports of producers to the Bureau of Mines.

Sales for chemical, building and refractory uses increased, whereas a slight decline was noted in agricultural lime. Total January-October lime sales in 1956 (7,615,640 tons) ran slightly behind the 7,649,463 tons sold on the open market for the corresponding period of 1956.

Total sales for chemical and other industrial use in October increased to 509,475 tons from 463,922 tons in September. Refractory sales increased to 233,224 tons in October from 216,207 tons in September.

Soda Ash—Light and dense ash activity was only moderate during the week. Producers expected business to gain during the remainder of February.

Glass industry demand was only routine at present. Later in the quarter it is anticipated that manufacture of beverage bottles for the summer trade will get under way. Producers feel this should stimulate the dense ash market considerably.

Paper industry operations during the past several weeks have not been at peak levels sustained during the latter part of 1956. However, it was anticipated that demand for paper should pick up during the next few weeks, resulting in a corresponding increase in consumption of light ash.

Soda, Caustic—United States rayon and acetate yarn and staple production in 1956

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Heavy Chemicals

amounted to 1,147,900,000 pounds, a decline of 9 percent from the 1,260,700 pounds produced in 1955, according to the Textile Economics Bureau.

This figure was still well above output levels for 1954. High tenacity yarn production showed a decline of 14½ percent during the year, according to the bureau.

Current buying interest was on a hand-to-mouth basis, with consumers buying material only as needed. It was generally felt that business would pick up during the remainder of the quarter.

Sodium Chlorate — Prices continued without change. Demand was active for industrial end uses. Supplies were deemed adequate for current needs.

Sulfur—The following figures represent production, shipments and stock of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons.

	November	*October*
Native production.....	514,772	529,056
Shipments	376,745	517,469
Sales*	368,370	504,214
Stocks†	3,852,028	3,705,626
Recovered production....	39,580	40,750
Shipments	38,386	38,868
Sales*	39,360	39,572
Stocks†	119,157	118,397

* Calculated from production and change in stocks during the period.

† Producers' stocks at mines or plants, in transit, and in warehouse at end of period.

Nonferrous Metals

Copper—There was some earlier uncertainty about whether the recently lowered price of 34c. would stick, but it appeared late in the week that the market was becoming stabilized at that level.

Earlier, there had been some further downward pressure exerted by lack of demand, and at least one custom smelter lowered its price to 33c. late in the week.

Mercury—Market was quiet. Metal was pegged at $255 to $257 per 76-pound flask, spot.

Nickel—The annual report of a nickel producer forecasts that by 1960, through expansion, the nickel producing capacity of Canada will be raised to 475 million pounds per year; United States (including the government's Nicaro, Cuba, installation), 67 million pounds; New Caledonian ores processed in France and Japan, 65 million pounds, and other free world sources, approximately 18 million pounds, for a total of 625 million pounds.

This figure compares with production in the free world in 1956, which set a new high record of approximately 450 million pounds. Output by Canadian producers accounted for about 80 percent of the free world's supply.

Distribution of the total free world nickel supply in 1956 approximated that of the previous year, with about 65 percent going to the United States and 35 percent to Canada, the United Kingdom and other countries of the free world.

Heavy defense production continued to use a substantial part of the nickel distributed to the United States, far in excess of the percentage for other principal base metals.

Increased amounts were employed for defense uses, and although the quantity available for civilian use was somewhat greater than in 1955, limitations in supply and continuation of deliveries to government stockpile continued to retard full development of established and potential markets.

Selenium—Production of metallic selenium and selenium compounds, in November was 81,848 pounds of contained selenium, according to reports received from selenium producers by the Bureau of Mines.

The output was 27.5 percent less than the October production of 112,919 pounds, but was 15.3 and 17.0 percent above the average monthly production in 1955 and 1954, respectively. Shipments in November, 1956, totaled 67,916 pounds of contained selenium, compared with 90,739 pounds shipped in October.

General selenium imports to the United States in October were 39,844 pounds. Imports of selenium from Canada in October totaled 26,475 pounds compared with September imports of 21,050 pounds, according to statistics furnished by the Department of Commerce.

Silver—Bullion was quoted at 91⅜c. per troy ounce, spot, on Friday.

Tin—The market moved in a narrow range, and appeared slightly firmer. Straits metal was quoted at $1.03¼ per pound, spot, Friday.

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Belgium Behind Others in Chemical Growth

—Continued from page 3

larger countries surrounding Belgium are highly concentrated and have the advantage of centralized factories which can make a much greater range of products than the Belgian industry with its more limited equipment. These companies also have laboratory and research facilities which Belgian firms cannot support on their present capital.

For comparative purposes, the report cites several large European firms. For example, Imperial Chemical Industries employs 80,000 workers; the German firm of Hoechst has 35,000. In Belgium, the Solvay group and Union Chimique Belge together do not employ more than 6,000.

Hampered by Other Difficulties

The industry has been hampered by other difficulties, especially the relatively small size of the domestic market and the high costs of coal, electricity, and labor. While other industries have taken steps to overcome these disadvantages by large investment programs and more efficient utilization of labor, the management of Belgian chemical firms has not implemented so far a major program of this type.

"Along with its financial conversation, the Belgian industry has been cautious in accepting new methods and techniques. The chemical industry is the only large group in Belgium which did not take advantage of a 1947 law under which it could establish an industry research center with a levy on producers for a portion of the expenditures.

"It also is pointed out that the larger factories, with ample financing and laboratory facilities, can study new products and experiment with new techniques. The mass production of today demands an enormous amount of equipment which has a high rate of obsolescence and must also have extensive facilities for research and market development, both of which are costly.

"The Belgian industry is scattered. It has a total of 52,000 workers and employees, less than in a single great foreign enterprise, such as Imperial Chemical Industries, Ltd. The remedy lies in greater coordination and concentration, accompanied by rationalization, reequipment, and improved distribution methods.

Employment Problem

"Another of the chemical ndustry's problems is one that is not by any means entirely Belgian but is widely prevalent in countries wth large and prosperous chemcal industries. This is the lack of qualified personnel of all grades, including engineers, technicians, research management specialists, and skilled workers. The problem is urgent and is one of the chief factors in the industry's partial stagnation. Employment in the Belgian chemical industry has fluctuated as shown below:

1951	48,860
1952	46,700
1953	47,100
1954	48,800
1955	54,400
1956	52,000

"In the investment field lies another difficulty. Capital for the industry is entirely inadequate and does not permit rapid expansion. However, some improvement was noted in 1955, when it is estimated that 1.35 billion francs were invested, a substantial increase over the amount in previous years. Preliminary estimates place the 1956 figure at 2 billion (50) Belgian francs equal US $1, approximately). However, these amounts are disproportionate with respect to the total needs of the industry. One of the obstacles to obtaining new capital has been lack of incentive for investment. A more satisfactory return is needed to attract the necessary funds. Nor are Belgian expenditures for

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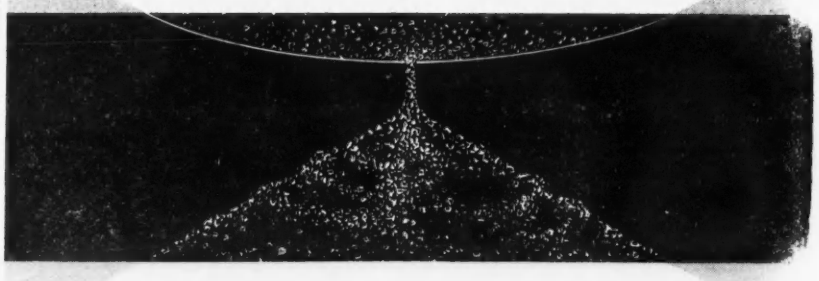

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Fertilizer Industry

"The fertilizer branch furnishes one of the most striking examples of some of the chemical industry's problems. This sector had an especially difficult time in the years 1949-54. It struggled against low export prices and high production costs, which led to a marked reduction in earnings. However, the situation has improved recently and is more nearly in balance. The industry is preparing to increase substantially its capacity, a goal which is indispensable to reducing prices.

Six firms, with eight plants, comprise the synthetic fertilizer group, all of which carry on other activities. These are:

"Belge de l'Azote et Produits du Marly, which has factories at Renory-Liege and Marly, Vilvore;

Societe Carbochimique, plant at Tertre;

"Union Chimique Belge, plants at Zandvoorde (Ostend) and Houdeng-Goegnies (La Louviere);

"Ammoniaque Synthetique et Derives, factory at Willebroeck;

"Kuhlman, plant at Zelzaete; and

"Engrais et Produits Chimiques de la Meuse, with a factory at Tilleur.

"These plants produce principally ammonium sulfate and ammonium nitrate, but also make mixed fertilizers. The industry is coke-baked. The fertilizer companies own the cokeovens, but there are other independent cokeoven installations, which include:

"Association Metallurgique, which has its plant at Willebroeck;

"Carbonisation Centrale, with works at Tertre;

Cokeries du Marly, plant at Marly, Vilvorde;

"Fours a Coke de Zeebrugge, with its works at Zeebrugge.

"World production of fertilizer is up substantially and is estimated to have doubled since 1938. Belgium's share was 3.6 percent in 1938, but rose to 4.5 in the period 1948-51. It dropped to 3.5 in 1952-53, but recovered somewhat to 3.9 in 1953-54. A large portion of the output is exported, with outgoing shipments estimated as high as 68 percent of total production.

"Increases in Belgian production of chemicals and range of products are divided among all branches. One of the most important is photographic materials, a leading export category. New factories include several for synthetic detergents. Formerly, these products were entirely imported, but today are made in Belgium in large quantities. The newest of these plants, the subsidiary of a large United States company, has been established at Malines, from which it plans to supply the Benelux countries.

"In the petrochemical field, the plant at d'Anvers was scheduled to come on stream at the end of 1956. Details concerning production and future plans are not yet available. New plants of d'Electro Chimie are expected to begin production of titanium oxide in the latter part of 1957. In the plastics field, Sidac is producing polyethylene.

Belgian pharmaceutical products have acquired an excellent reputation and this branch is one which is considered to have great possibilities. However, price controls have deterred new investment in this sector of the chemical industry.

"The following is a list of chemical products now being made in Belgium for the first time, with the location of the plants in parentheses:

"Sodium tripolyphosphate (Zandvoorde)
"Antibiotics, including penicillin, streptomycin, aureomycin, terramycin (Genval-Rosiere)
"Phenol (Steinfort)
"Potassium carbonate (Tessenderloo)
"Coaltar dyes, pigments, and intermediates (Tertre)
"Chlorinated organics (Jemeppe s/Sambre)
"Synthetic resins—phthalic, acrylic, urea, and maleic (Jemeppe s/Sambre, Ougree, etc.)
"Cotton linters (Drookenbosch)
"Pharmaceutical specialties (Forest et Divers)
"Petrochemicals—organic synthesis of waste gases (Anvers)
"TNT and 'Ball' powder (Baelen-Caulille)
"Synthetic varnishes and rubber-based paints (Divers)
"Tannic and gallic acids (Wetteren)
"Sodium hydrosulfite (Foret-Trooz)
"Nitrous oxide (Ougree)
"Argon and rare gases (Schelle)
"Organic silicon derivatives, silicon varnishes and oils (Droogenbosch)
"Fatty alcohols and derivatives (Ougree)
"Gentisates and antihistamines (Forest-Brux)
"Artists' colors and paints (Bois de Breux)
"Detergents, based on fatty alcohols and derivatives of ethylene oxide, propylene, and ethanolamines (Ougree, Malines, Forest)
"Organic phosphates and phthalates (Sheeonaerde, Droogenbosch)
"Dextrine (Wijmael)
"Nickel sulfate (Hoboken)
"Phthalocyanine pigments (Charleroi, Menin)
"Maleic anhydride (Schoonaerde)
"Basic materials for polyvinyls, polethylene, and polystyrene (Divers)
"Carbon black (Gand)
"Tetramethylthiuram disulfide.
"Ferroalloys, manganese, silicon-manganese, and tungsten (Langerbrugge)
"Specialized photographic materials and films

"Statistics for the first part of 1956 foreshadow new progress. There has been a notable advance in exports of pharmaceuticls and photographic specialties, tanning extracts, dyes, gelatine, and fertilizers. Two classes were down—heavy chemicals and explosives, decreases which were anticipated.

"The Belgian chemical industry is expanding, but not at a sufficiently rapid rate and it needs some of the assets which support its foreign counterparts. It operates on the highest-priced coal in Europe and to overcome this initial disadvantage it must expand and diversify its output. It will be many years before the newly-established petrochemical industry can supplement in quantity the raw materials obtained from coal.

"Producers are recognizing more and more that no branch of manufacture will assume greater importance in the future than chemicals and this has led to efforts to improve the industry's position, with good results. It remains for member firms, government, and all others concerned with chemical progress to encourage greater investment in the industry and assist it to achieve a higher degree of technical development and a wider range of products."

Purchasing Agents Analyzed For Chemical Industry Ass'n

The trained buyer is not merely an "intelligently calculating machine," but rather is frequently affected by the same emotional factors that move the average consumer, the Chemical Industry Association was told last week.

Speaking at a CIA dinner meeting, Irving Gilman, vice-president of the Institute for Motivational Research, pointed out that while a purchasing agent may seek a rationalization to support his preferences, his area of decision is often circumscribed by the policies of his management.

Industrial advertising, Mr. Gilman said, has the task of influencng those at the decision-making level. By contrast, the sales approach should be one of supporting the P. A. by providing arguments he can use in defending his decisions.

Spencer Elects

—Continued from page 4

tion, sales and product development in the polyethylene and nylon fields.

John R. Brown, jr., formerly managing director of research and development, has been elected vice-president for research and development.

E. V. Friedrich, formerly assistant to the president, has been elected vice-president for administration.

C. Y. Thomas, John P. Miller and Joe E. Culpepper, all of whom have been vice-presidents and directors of the company for several years, will be primarily concerned with divisional coordination at a policy level and with long-range planning for future growth.

Fertilizer Sales to Poland Aim of State Department

The State department announced last week that it would enter into negotiations shortly with Poland to set up a line of credit under which Poland may purchase commercial fertilizers, fats and oils and certain other products from United States suppliers.

No dollar amounts involved were contained in the announcement, but it is understood that Poland hopes to obtain about $100 million to finance its needs for these materials and other items such as cotton, farm machinery, mining equipment and cattle feeds.

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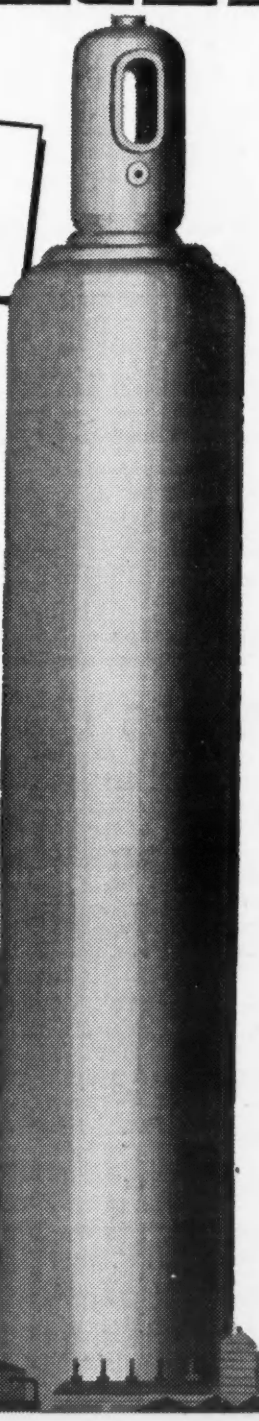

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Minerals Buying Program Hits Snags in Congress

A requested $30 million deficiency appropriation to carry on the government's minerals purchase program during the remainder of the current fiscal year was turned down by the house appropriations committee last week. The action was later approved by the house, but an attempt will be made to have it reversed in the senate.

The fund had been recommended by the President to continue the buying of tungsten, asbestos, fluorspar and columbium-tantalum under the program approved in the closing days of the last session. The last congress provided $21 million for the program as an emergency measure pending adoption of a long-range stockpiling program.

Rabies Vaccine Produced

—Continued from page 5

is made possible by the use of duck embryos in processing.

The new vaccine—an inactivated, or killed, virus vaccine—is being manufactured and marketed by Eli Lilly & Co., Indianapolis, Ind. The result of six years of research and development work, it is the first commercially available vaccine for human use for which the rabies virus is grown in non-nervous tissue.

The duck-embryo method was originated by Dr. H. M. Powell, of the Lilly biological research division.

Exclusion of the "paralytic factor" from the new vaccine is helpful to the physician in what has been a distressing problem—the decision whether to give a course of inoculations to questionably exposed patients.

The vaccine is considered doubly safe since the virus used in making it is of a strain which is nonvirulent in man. The nonvirulent virus is treated with a chemical which kills the virus but does not interfere with its antigenicity.

The development of an antirabies vaccine of such a high order of safety constitutes the most important advance in human rabies immunization since Louis Pasteur made the first rabies vaccine in 1885, according to Lilly.

At the Lilly laboratory for clinical research in Indianapolis, each of twenty-one persons given the full fourteen-dose treatment exhibited antibodies against rabies by the tenth day. Five of six who received only seven doses had antibodies by the tenth day. All persons who received the anti-rabies treatment had good antibody counts by the end of the fifteenth day.

The early development of antibodies is of prime importance in the treatment of bites of rabid animals. The incubation period of the virus in man is rarely less than fifteen days. In about 80 percent of cases of human rabies, the incubation period has been from three to twelve weeks.

Local reactions to rabies vaccine of duck embryo origin have been observed to be somewhat less than those seen with vaccines of brain origin. Tenderness at the site of injection is common.

The new vaccine is more stable than that of brain origin, since the killed virus is packaged in dry form and mixed with sterile water just before use. This makes a longer dating period possible—eighteen months as compared to six months for unused vaccine of brain origin.

"Rabies Vaccine, Dried Killed Virus (Duck Embryo)," is sold in packages containing seven individual one cubic centimeter doses of dried killed virus along with seven ampoules of water for injection, U. S. P. Two packages are required for a complete treatment which consists of subcutaneous administration of one dose for fourteen days.

The seven-dose package is convenient when the biting animal is being observed for a few days and it is advisable to start treating the patient before it is learned whether the animal is rabid. About 20 percent of persons who are bitten by animals known to be rabid have developed rabies if not treated with rabies vaccine. There is no known case of recovery from rabies in man.

Butadiene Plant

—Continued from page 3

standing for not less than thirty days, and allows for another thirty days in which negotiations are to be carried on with the bidders looking towards drawing up a definitive contract of sale. Within forty days after the termination of the negotiation period, the sale is to be reported to congress, which then has thirty days in which to veto the sale if it doesn't like the terms.

The Attorney General is required to file a report to congress when a sales contract is agreed upon, expressing his opinion on whether the proposed disposal would tend to create or maintain a situation inconsistent with the antitrust laws.

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Obituaries

Dr. Raymond Eller Kirk

Dr. Raymond Eller Kirk, dean of the graduate school of Polytechnic Institute of Brooklyn, N. Y., died February 6 in that city. He was sixty-six years old.

Dr. Kirk was co-editor of the *Encyclopedia of Chemical Technology*, regarded in the field as the authoritative compendium of its kind in English. Dr. Donald F. Othmer, head of the institute's chemical engineering department, was co-editor.

During World War I, Dr. Kirk was a civilian inspector of explosives with Army Ordnance. After the war, he was state chemist of Montana.

Foster B. Parriot

Foster B. Parriot, chairman of the executive committee of Sunray Mid-Continent Oil Company, Tulsa, Okla., died February 5 in that city. He was seventy-eight years old.

In 1918, Mr. Parriot started and headed Transcontinental Oil Company. In 1930, he sold Transcontinental to Ohio Oil. Later he formed Leader Oil, which was sold to Carter Oil Company in 1942.

Mr. Parriot was elected a director of Sunray Oil in 1937, chairman of the board in 1943, and chairman of the executive committee in 1952.

E. J. Griffin, sales assistant to the vice-president of the west coast marketing division of Shell Oil Company, New York, died February 1 in San Rafael, Calif. He was forty-eight years old.

Dr. W. Henry Rivard, dean of the Rhode Island College of Pharmacy and Allied Sciences since 1930, died February 5 in Providence, R. I. He was seventy-three years old.

Sandoz Has a New Film On the Use of Detergent

A new color film, "Sandopan DTC," illustrating the application of a unique, crypto-anionic synthetic detergent in the latest types of textile mill dyeing and finishing equipment has been released by Sandoz, Inc., New York.

The movie carries its audience through a twenty-four-minute tour of six textile mills and the New Bedford School of Textiles pilot plant.

A sequence of special interest to textile printers and print fabric converters covers the operation of the latest in modern, automatic Swiss printing equipment. Other plant scenes demonstrate the use of Sandoz's surfactant in continuous boiling and bleaching processes, its use on synthetics in the Hinneken boil-off machine, its application in package and beam dyeing, and its adaptation in hosiery scouring and dyeing.

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Methallyl chloride (3-chloro-2-methyl-1-propene) is now commercially available as a new product of Food Machinery and Chemical Corporation's recently formed organic chemicals division. This new chemical is expected to find application in the resin and plastics field as well as in organic synthesis, according to the New York firm.

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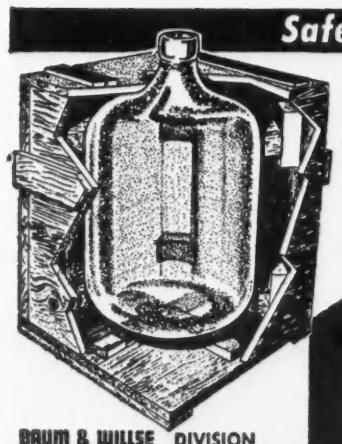
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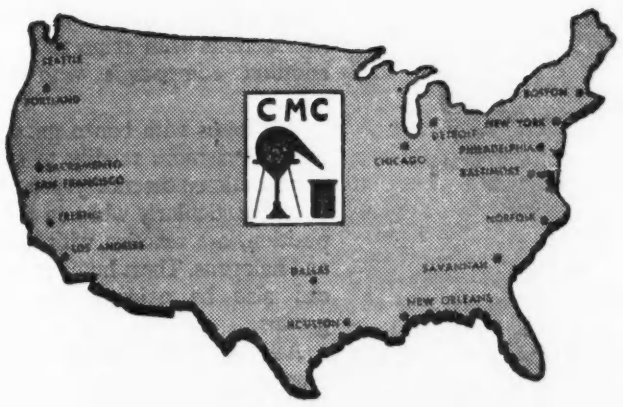

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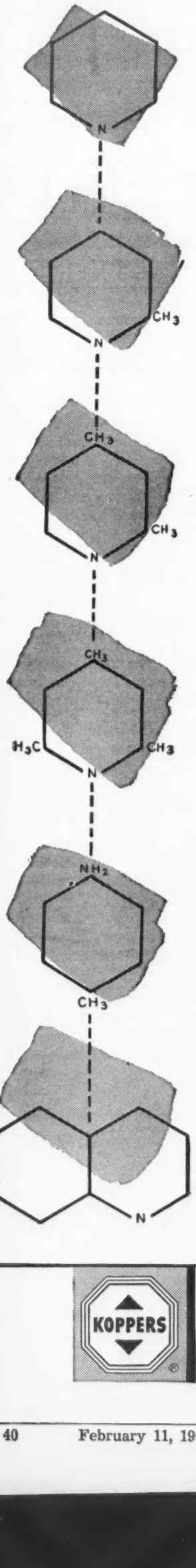

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Coal Chemicals

Trade sources representing a major fraction of domestic pyridine production reported last week that pyridine had gathered market strength gradually since last spring and was currently in even balance. The recovery from the poor position that characterized this market for years was featured by marked improvement in November and December, when, these sources reported, orders actually outran delivery and piled up a small backlog. The current inventory position was reported as optimum. Foreign competition was described as a minor nuisance only, with the explanation that the foreign material was either inferior with respect to water content and color or difficult to handle on account of delay in delivery and instability in storage.

The picture was not uniform, however. Some producers said pyridine was still poor, still beset by severe foreign competition and not appreciably improved by comparison with the position noted last spring.

With pyridine production heavier, a surplus of b-g-picoline was noted. The alpha and beta isomers of picoline were softer. Pure gamma was moving fairly well, the market being sustained by good export demand.

Benzol was still very strong, but consumers were finding it easier to acquire material in some areas.

Toluol was said to be much improved in the past two months in some areas, as weak as ever in some other quarters.

Xylol continued very strong in heavy volume of trade.

The institute estimated that steel production in the week ended February 10 would amount to 96.6 percent of theoretical capacity, equivalent to 2,472,000 net tons of steel. Steel output was 2,498,000 tons in the week previous, 2,519,000 tons in the comparable week in the month previous and 2,439,000 tons in the corresponding week in 1956.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
118.31	118.31	118.31	114.89

For Current Prices see Page 9

Basic Products

Benzol—Sales volume was maintained at a very high level last week, but there were reports in some quarters that consumers were finding it a bit easier to acquire ample supplies. One producer said that some consumers had recently built moderately heavier inventories, perhaps deliberately.

Other producers said the market had not eased at all and was, if anything, even stronger than it had been in fourth quarter 1956. The over-all picture suggested good balance and plenty of strength. Production and imports added up to vast figures, yet producers' stocks were everywhere trim.

(In this department in the previous issue, the last two paragraphs under the heading "benzol" were in error. These paragraphs actually referred to creosote and were erroneously left in the paper when the initial part of the item on creosote was removed for reasons of space.)

Creosote—The price advance of the first of this year has been absorbed in stride, and last week's trade was described as moderately improved over that of some months ago. Railroads were a little more active in treatment of crossties, and public works demand for treatment of poles and pilings was fairly strong.

The prospect was for long-term diminution of imports in light of the international political situation, which has already made itself manifest in sharply increased ocean freight rates and a critical shortage of shipping. If the current situation should prevail for long, trade sources said, the Europeans would have to burn creosote in heavy volume for fuel. There were no reports yet that foreign creosote had actually been disappearing in this manner. No imports of creosote were reported in October, but the November figure was abnormally large.

Production continued heavy, and inventories were still awkwardly large.

Pyridine—Producers representing a major fraction of total domestic output reported last week that the market had made a complete recovery from the poor position it had occupied for some years. They reported that the market was currently in even balance and that orders had actually outrun deliveries in November and December.

For these producers, business picked up steadily beginning last spring and spurted ahead in the final two months of 1956.

Inventories were said to be at optimum level.

This new prosperity did not, however, permeate all market areas. There were some producers who said the market had not improved appreciably, if at all, and that it was still being crippled by severe foreign competition.

In quarters where business had improved, foreign competition was regarded

Aromatic Chemicals Output: November

Following are statistics based on data compiled by the Tariff Commission relating to production of certain aromatic chemicals during November with corresponding figures for the month previous and cumulative totals for the calendar year. Figures representing cokeoven production of benzol, creosote oil, crude naphthalene and toluol are those previously published with other figures reported by the Bureau of Mines. Where no figure is given, it is because available data would have disclosed confidential information or because the data on hand were believed to be incomplete. Dyes are identified by color index or prototype number.

		November	October	First Eleven Months 1956
Acetanilide	lbs.	.....	383,500	1,697,469
Aniline	lbs.	10,649,683	10,948,630	115,143,684
Benzol, tar distillers	gals.	4,111,562	4,345,144	31,917,146
Cokeoven operators	gals.	17,069,627	16,651,277	161,316,396
Total from coal sources	gals.	21,181,189	20,996,421	193,233,542
Petroleum operators	gals.	9,989,653	11,235,936	103,834,106
Total from all sources	gals.	31,170,842	32,232,357	297,067,648
Creosote oil (100 percent creosote basis)				
Tar distillers	gals.	9,055,974	9,146,243	83,408,766
Cokeoven operators	gals.	3,145,477	2,610,332	22,203,249
Total	gals.	12,201,451	11,756,575	105,612,015
Cresols, meta-para	lbs.	1,424,295	1,448,371	13,858,898
Ortho-meta-para	lbs.	651,735	1,059,217	7,448,310
Cresylic Acid, refined, all sources	lbs.	5,006,385	5,508,235	54,348,473
Dyes, C. I. 202, chrome blue black R	lbs.	125,286	46,739	501,375
C. I. 581, direct black EW	lbs.	473,248	581,949	4,302,866
P. 302, naphthol AS	lbs.	76,081	102,825	786,222
Monochlorobenzene	lbs.	35,811,205	33,679,240	407,148,149
Naphthalene, crude, tar distillers	lbs.	26,112,757	26,979,099	269,509,625
Cokeoven operators	lbs.	15,709,784	16,474,527	161,312,987
Total crude	lbs.	41,822,541	43,453,626	430,822,612
Refined, tar distillers	lbs.	5,917,727	6,449,325	73,127,402
Phenol, tech. and USP, all sources	lbs.	44,264,083	44,173,310	472,055,044
Phthalic Anhydride	lbs.	25,040,836	27,002,483	288,399,533
Styrene, from all plants	lbs.	101,410,668	96,118,081	1,010,754,808
Toluol, cokeoven operators	gals.	3,363,274	3,417,886	33,712,151
From other sources	gals.	12,794,423	12,732,871	125,480,689
Total from all sources	gals.	16,157,697	16,150,757	159,192,840
Xylol, from all sources	gals.	11,208,820	12,540,655	115,547,541

Coal Chemicals

as a minor nuisance. It was said that much of the cheap material moved in from Russia via Germany offered no saving to many consumers, its quality being inferior with respect to water content and color. Some British pyridine was better grade, but, these sources said, consumers of this material were inconvenienced by the lapse of time between ordering and delivery and the difficulties of storing the material in view of its tendency to pick up moisture and go off grade.

While the whole pattern of demand responsible for improved trade was not clear, it was considered likely that consumption of pyridine in manufacture of pharmaceuticals had picked up generally.

A number of new outlets, still in an early development phase, gave some hope of a substantially broader market base in the years ahead. One producer said it was just possible that these would come along fast enough and far enough to make the pyridine market very tight a year from now.

Production has been stepped up lately.

Toluol—Last week's market was spotty.

One producer reported considerable improvement on the basis of orders for January and February delivery. He said the firmer tone was probably due in part to greater consumption in high test gasoline.

Another view was that demand was stronger but insufficient to narrow the gap on production, with the result that inventories were still growing at an undiminished rate.

Yet another producer reported no improvement whatever, with demand weak with respect to available supplies.

Xylol—This market was uniformly strong last week. With production sustained at a very high level, all available material was moved promptly. Some producers, describing supply as very tight, said that demand had picked up added strength in the past two months or so. In general, however, it was reported that consumers in most areas were able to get enough material to take care of immediate requirements.

Intermediates

Demand for dye intermediates continued slack, the situation unchanged from that which has prevailed for the past six months. Trade was in limited volume, with supplies generally abundant. Prices were steady.

Trade sources were unable last week to see any firm indication that a new trend was in the making.

Aniline—Trade remained at a depressed level last week, continuing on the trend first manifested last spring. Production has been cut back sharply to hold inventories down to a reasonable level. Improvement in the textile industry was counted on for heavier demand. Some foreign markets might have been lost permanently, however.

Prices were regarded as stable at quotations of long standing.

H- Acid—Demand was weak over all, and what there was of it appeared erratically. Trade for this dye intermediate was listless and in light volume. Supply was more than ample. Quotations were unchanged at levels of long standing.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Feb. 10 was as follows:

Ammonia liquor	lbs.	962,123
Ammonium sulfate	lbs.	40,967,820
Benzol	gals.	3,662,275
Coaltar	gals.	18,001,012
Creosote	gals.	698,315
Naphthalene, crude	lbs.	3,895,047
Pyridine	lbs.	13,966
Toluol	gals.	806,942
Xylol	gals.	232,772

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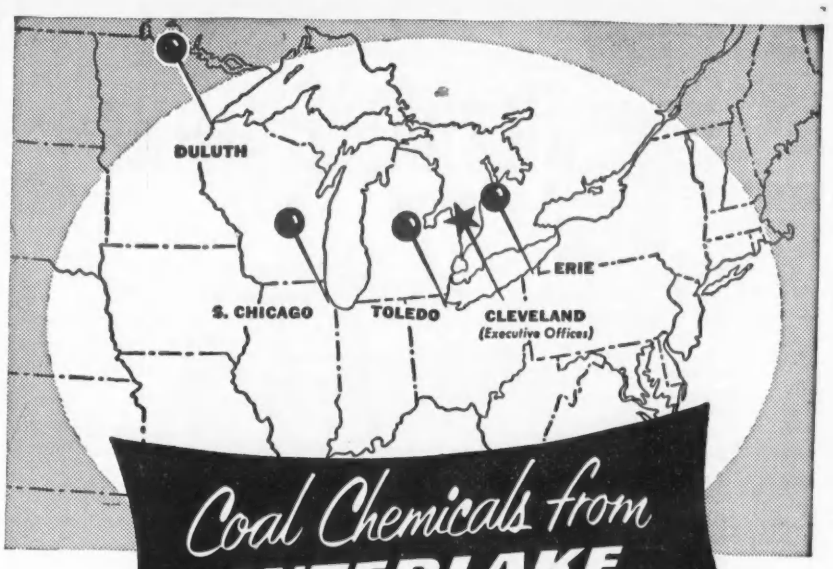

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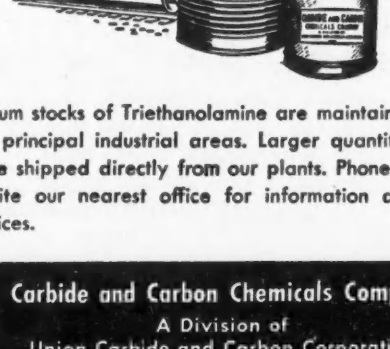

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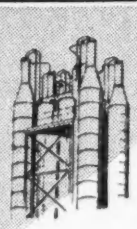

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'Blister Glass' Paint Tester Is Made by Archer-Daniels

Archer-Daniels-Midland Company, Minneapolis, Minn., has devised a "do-it-yourself" demonstrator to show the blister-resistance of house paints made with ADM vehicle. It is a "blister glass," a miniature paint tester.

The "blister glass" is said to provide a small scale illustration of results obtained by ADM in actual field tests on fifteen houses in the Minneapolis-St. Paul area.

The "blister glass" consists of a drinking glass, a wooden disc and a piece of plastic tape. The apparatus is said to show blistering reactions of various paint vehicles when moisture and heat are applied.

Cresols, Cresylic Acids

—Continued from page 5

thetic para cresol. It is probable that even more high boiling fractions could have been made available if they could have been sold, but the amount of the lower boiling grades was just about at a maximum.

"There is no assurance that less tar will be burned by the steel mills without processing, therefore, larger coaltar potential does not seem to be certain. While more cokeovens will be erected, as steel output expands and older ovens wear out, there is always the probability that more oxygen will be used in the smelting of the iron ore with consequent decrease in the amount of coke necessary, Mr. Carpenter said.

"Accordingly, it is not believed that we can hope for large increases in tar acids in this country from high temperature coking. The yield of tar acids is so very much higher from low temperature coking that this process may, and probably will, give us increased production if it can be worked out to be profitable. It could certainly be expected to furnish cresols at a lower price than they could be offered, if of synthetic origin. The large potential for the future is for cresols from hydrogenation of coal, but the necessary tremendous investment may not be undertaken until a real shortage of petroleum fuel develops.

"Such a process could never be considered for its tar acid production alone although yield per ton of coal is said to be many times as much as from high temperature coking," the speaker said.

Oil Shale a Source

Another important source of tar acids at some future date may be from oil shale which is available in large quantities in Colorado. The shale known to be there should produce 80 to 100 billion barrels of distillate it is estimated and tar acid yield would be good. There seems to be no certainty of any regular great increase in volume from any source, compared to 1955. Even if petroleum produced 77 to 80 million pounds as compared to 61 million pounds in 1955 and if all coaltar was processed to extract acids before burning or using for other purposes, thus giving possibly 25 million pounds more and if as much A.D.F. acid were imported regularly, as in 1951, there would still be only about 250 million pounds, of which about 50 million pounds would be phenol, leaving 200 million pounds of cresols and cresylic acids. Some of this could not be used for the chemical purposes for which cresols and xylenols are so very important and for which shortage might become acute," said Mr. Carpenter.

"Currently, the best prospects appear to be from low temperature coking and from more petroleum acid, than the 77 million pounds previously cited as maximum. The 1956 demand was not quite as good as 1955 for pure and mixed cresols and possibly more time will elapse before demand will require more than present availability.

"Certainly the history of this country has been that when something was in short supply, production was expanded, or a satisfactory substitute provided. This has been proven to be true for tar acids in the form of phenol, closely related to cresol. From the numerous possibilities outlined, a solution of the problem is to be expected when demand warrants increased volume," the speaker concluded.

Arthur D. Little

—Continued from page 5

stitute. Other British members of the board will include Dr. David S. Anderson, director of the Royal Technical College at Glasgow; Sir Robert Erskine-Hill of Edinburg, and Prof. Sir Ian Heilbron, director of the Brewing Industry Research Foundation.

American board members will be Raymond Stevens, president of ADL, Dr. Bass and William A. W. Krebs, jr., another vice-president of the Cambridge company.

While some aspects of scientific work on seaweed will continue under the auspices of the Institute of Seaweed Research at the Inveresk laboratories, the new institute will be concerned primarily with work for industrial sponsors.

Mallinckrodt Manager Named

Appointment of E. Richard Kuehne as regional sales manager has been announced by W. S. Keutzer, western division sales manager of Mallinckrodt Chemical Works, St. Lous, Mo.

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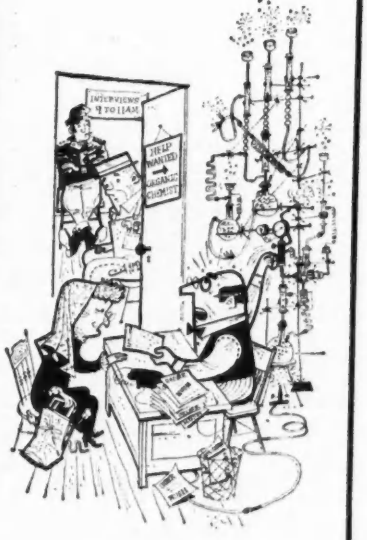

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Aliphatic Organics

Demand for carbon tetrachloride for use as a propellant for aerosol sprays and other rapidly developing outlets continued to support an active market in spite of sharply curtailed sales of carbon tet for use in dry cleaning preparations. Substantial additional production capacity has been in operation in recent months, with the result that the consistently heavy consumption has resulted in no appreciable shortages or dislocations. On the basis of data for the first eleven months of the year, it appeared that production in 1956 would amount to more than 300 million pounds.

Demand for ethyl chloride for use as a solvent and refrigerant and in manufacture of organic dyes and pharmaceuticals accounted for steady trade in moderate volume. The market was described as stable, with no change in prices of long standing.

Quotations on allyl bromide, bromochloromethane, ethyl bromide and methyl bromide—long unchanged—were not immediately affected by announcement of a 1 cent per pound increase in the price of bromine effective immediately on spot and April 1 on contract. Producers of these compounds absorbed increased costs resulting from the previous increase in the bromine price, a 1 cent per pound advance effective July 1, 1956.

Minimum quotations on blackstrap molasses declined ¼c. per gallon last week at New Orleans but held steady at New York. Declines of ½c. to 1c. per gallon were reported at numerous market centers from Mobile to Cincinnati to Denver.

Cuban Sugar Stabilization Institute reported bids aggregating more than 200 million gallons as of February 1, but no sales were yet known to have been consummated. Buyers and sellers alike were meantime marking time.

Demand was moderate to slow at New Orleans, moderate to good at New York. Supplies were adequate at both points.

With the seasonally erratic trade in antifreeze raw materials at a virtual standstill, secondary markets were providing steady trade in moderate volume for ethylene glycol. Manufacture of pharmaceuticals and alkyd resins, food and tobacco processing and demand for ethylene glycol as a component in brake fluids sustained the market.

Acetic Acid—Production in November, according to data published by the Tariff Commission, amounted to 46,853,484 pounds, including 45,323,484 pounds of synthetic and 1,530,000 pounds of natural acid. The November figure for natural material was by far the least reported for any of the first eleven months in 1956. Comparable figures for the month previous were 1,720,000 pounds natural and 47,622,621 pounds synthetic, for a total of 49,342,621 pounds of acid.

Cumulative figures for the first eleven months of 1956 were 20,642,000 pounds natural and 483,416,299 pounds synthetic, a total of 504,058,299 pounds of acid. Production of synthetic material in twelve months in 1955 was 514,330,588 pounds.

Acetone—Tone of this market was quite firm last week, with supplies just sufficient to satisfy consumer' immediate requirements. Sales volume was reported to be moderately heavy. The current market reflected marked improvement over the past two years.

Production in November was 48,371,990 pounds, the Tariff Commission reported, off substantially from the 54,305,059 pounds turned out in the month previous. The aggregate for the first eleven months of 1956 was 554,896,123 pounds, compared to 539,247,041 pounds produced in twelve months in 1955.

Allyl Bromide—Prices were steady last week as bromine was advanced 1c. per pound on spot and effective April 1 on contract. The previous increase in bromine price, a 1c. per pound advance put into effect July 1, 1956, was absorbed by makers of allyl bromide.

Amyl Acetate—For the sixth consecutive month, the Tariff Commission reported no production during November. Up to that time, the only figure given on production in 1956 was 483,281 pounds turned out in May.

Prices in effect last week in the east, on a delivered basis, were 14c. per pound in tanklots, 16½c. per pound in carlots and 17½c. per pound in less carlots. The material was packaged in drums.

Bromochloromethane — Quotations on this material remained unchanged last week as a 1c. per pound increase in the price of bromine was announced effective immediately on spot and April 1 on contract. Producers absorbed the previous bromine price increase, a 1c. per pound advance effective July 1, 1956.

Carbon Tetrachloride—This material was classed as a good mover last week. The market in dry cleaning was all but lost to new cleaners with high threshholds of toxicity, but demand for carbon tet for use as a propellant in aerosol sprays was booming.

Substantial additional production capacity has been in operation in recent months, with the rsult that the rather heavy volume of sales has resulted in no appreciable shortages nor dislocations.

Ethyl Alcohol—Figures on production, withdrawals and stocks of undenatured,

Price Trends

Advanced
None.

Reduced
Molasses, New Orleans, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
131.12	131.12	130.87	131.02

For Current Prices see Page 9

Aliphatics Foreign Trade: November

Exports and imports of industrial aliphatic organics for the month of November, the cumulative total for the year to that time and the month previous, as reported by the Bureau of Census, were as follows:

EXPORTS	Quantity	November	October	First Eleven Months 1956
Alcohol and glycols				
Butyl alcohols	lbs.	2,988,948	150,950	35,012,233
Ethyl alcohol and methylated spirits	lbs.	41,006	7,780	* *
Ethylene glycol	lbs.	2,638,254	464,900	48,511,543
Glycerine, 100 percent basis	lbs.	680,786	717,004	9,375,985
Methyl alcohol	gals.	464,386	82,287	* *
Propyl alcohols	lbs.	557,395	325,425	5,064,884
Butyl acetate	lbs.	1,068,290	842,664	9,743,102
Methyl ethyl ketone and methyl acetone	lbs.	736,030	853,642	8,342,400
IMPORTS				
Acetone, MEK and homologues	lbs.	107,001	1,569,790	8,035,820
Acid, acetic (over 65 percent)	lbs.	210,000	493,280	7,530,060
Acetic anhydride	lbs.	727,225	511,285	3,831,280
Chloro (mono and trichloro) acetic	lbs.	430,503	170,311	2,700,529
Formic	lbs.	124,430	69,210	1,020,843
Lactic (55 percent or more by weight)	lbs.	.....	.....	4,590
Alcohol, Amyl, and fusel oil	lbs.	.....	.....	61,700
Butyl	lbs.	.....	.....	194,900
Ethyl	gals.	.....	.....	11,355,962
Glycerine, crude	lbs.	1,368,648	2,391,824	19,696,112
Glycols, their ethers and esters	lbs.	87,963	8,800	376,786
Methyl, including wood alcohol	gals.	.....	.....	181,383
Vinyl, including derivatives	lbs.	1,983,920	2,385,458	20,128,772
Tetrachloroethane	lbs.	1,000	.....	6,800
Trichloroethylene	lbs.	1,588,306	2,793,365	20,543,171
Vinyl acetate, unpolymerized	lbs.	2,715,040	3,586,220	35,197,693

* * No comparable data available.

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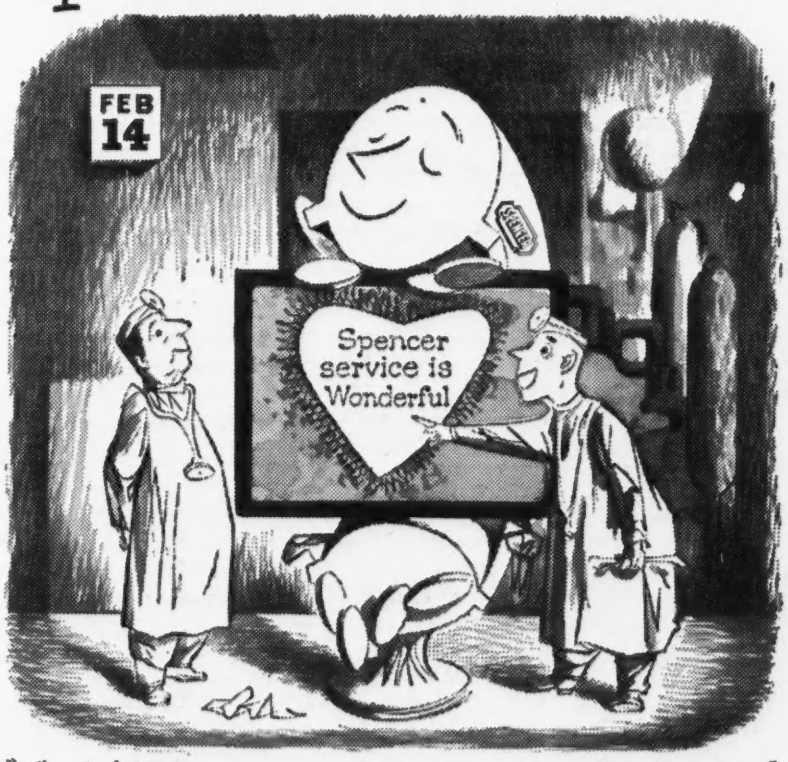

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Aliphatic Organics

completely denatured and specially denatured ethyl alcohol compiled by the Alcohol and Tobacco Tax Division, Internal Revenue Service, were as follows for the month of November this year and last:

Net Production

	Gallons 1956	Gallons 1955
†Undenatured	36,655,787	41,911,253
*Completely denatured	78,507	60,647
*Specially denatured	19,509,481	20,321,994

Withdrawals

†Undenatured, tax paid	1,307,209	945,859
Tax free	36,610,259	38,106,559
*Completely denatured	77,156	68,111
†Specially denatured	18,804,125	21,192,413

Stocks at End of Period

†Undenatured	33,844,411	44,710,155
*Completely denatured	21,117	22,187
*Specially denatured	11,156,668	6,054,844

* Wine gallons. † Proof gallons.

Materials used in industrial alcohol plants in November this year and last were reported by the Alcohol and Tobacco Tax Division, as follows:

	Pounds 1956	Pounds 1955
Corn and corn products	2,523,800	3,263,792
Rye and rye products	.....	.....
Malt and malt products	129,770	133,004
Wheat and wheat products	396,000	1,162,032
Sorghum grain and sorghum grain products	1,463,730	2,716,415
Total grain	5,513,300	7,275,243
Ethylene gas	6,071,595	7,817,001
Other materials	78	1,915

	Wine Gallons 1956	Wine Gallons 1955
Molasses	3,333,094	9,824,807
Ethyl sulfate	21,393,015	18,635,602
Sulfite liquors	24,352,500	24,323,800
Other materials	1,048,309	1,420,201
†Products used in redistillation	675,383	1,154,660

† Proof gallons.

Quotations for tax paid absolute alcohol last week were $21.54 per gallon in tanklots, $21.70 per gallon in carlots and $21.75 per gallon in less carlots. This schedule was applicable east of the Rockies on a delivered basis.

Ethyl Bromide—Prices remained unchanged last week as a 1c. per pound increase in bromine prices was announced effective immediately on spot and April 1 on contract. Producers of ethyl bromide absorbed the previous price increase in bromine, a 1c. per pound advance put into effect July 1, 1956.

Ethyl Chloride—Steady trade in moderate volume was supported by demand for ethyl chloride for use as a refrigerant and solvent and in manufacture of organic dyes and pharmaceuticals. The market was described as stable. Prices of long standing remained unchanged.

Glyoxal—On a 30 percent basis, this material was quoted at the works at 20½c. per pound in carlots and 21¼c. per pound in less carlots.

Methyl Bromide — Quotations held steady at long established levels as producers of bromine last week announced a 1c. per pound price increase effective immediately on spot and April 1 on contract. Methyl bromide producers absorbed increased costs attributable to the previous advance in price of bromine, a 1c. per pound increase effective July 1, 1956.

Molasses—Minimum prices on blackstrap declined another ¼c. per gallon at New Orleans last week, with sales most recently reported at prices ranging from 27c. to 27½c. per gallon, most at the lower figure. Demand there was moderate to slow, supply adequate.

Some distributors were all but out of the market, awaiting definite word of sales of the new Cuban crop. Bids for an aggregate of more than 200 million gallons were reported as of February 1 by Cuban Sugar Stabilization Institute, but no sales were known to have been consummated.

Ten cars of blackstrap were sold by producers in Louisiana through the exchange at 27c. per gallon.

One mill in Puerto Rico sold the bulk of its 1957 crop at 18c. per gallon, f.o.b. mill, Agricultural Marketing Service reported.

The blackstrap market at New York was unchanged, with prices steady at 29c. per gallon. Demand there was moderate to good. Supply remained adequate.

Blackstrap declined 1c. per gallon at Denver and was off ½c. per gallon at Beaumont, Houston, Mobile, Memphis, St. Louis, Chicago, Cincinnati and Kansas City.

Oxalic Acid—Trade in this acid was moving along evenly last week. Demand was described as seasonally normal, with most of the material being consumed as a rust remover in automotive radiator flushes and in laundry applications. Production was being maintained on a fairly even keel. Supplies were generally adequate. Prices, unchanged in years, were regarded as stable.

Tariff Commission reported production in November amounted to 1,827,866 pounds, compared to 1,674,263 pounds turned out in the month previous. Including one month, August, when no production figure was reported, the aggregate for the first eleven months of 1956 was 18,924,323 pounds. Total output in twelve months in 1955 was 23,205,949 pounds.

Propylene Dichloride—Prices in the east, on a delivered basis, stood last week at 8.45c. per pound in carlots and 9½c. per pound in less carlots. The material was packaged in drums.

Propylene Glycol—Volume of trade last week was stable. Trade sources noted seasonally normal demand for this material for use as an eterification agent in manufacture of polyester resins and as a component in hydraulic fluids. Its market as a component in antifreeze fluids was narrowly limited.

Supplies were generally ample, but there was no evidence that producers' stocks were more than normal.

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PHYSICAL PROPERTIES

Molecular Weight	89.14
Boiling Point, at 760mm	165°C
Melting Point	30-31°C
Specific Gravity at 20/20°C	0.934
pH of 0.1M Aqueous Solution at 20°C	11.3
Solubility	Miscible with water, aromatic hydrocarbons, alcohols, esters. Insoluble in aliphatic hydrocarbons.

SPECIFICATIONS

Neutral Equiv.	88.5-91.0
Color, APHA, max.	20
Water, by wt., max.	0.8%
Distill. Range	156°C-177°C
Below 161°C, max.	10%
Above 168°C, max.	5%
Odor	Characteristic
Non-volatile matter by weight, max.	0.005%

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AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)(NH_2)CH_2OH$

TRIS AMINO (Tris [hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

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CSC INDUSTRIAL CHEMICALS

Agricultural Chemicals

Continued bad weather gave a level of strength to the feeds market, dealers in animal proteins reported, though the firming motion wasn't great enough to bring about any price shifts in that area. Pesticides continued to show strength on the foreign scene with inquiries in the domestic scene beginning to arrive as a harbinger of the pending seasonal period. Several new materials have arrived on the scene with a number of old ones slidding into eclipse. In the fertilizer market, dealers are in the process of shipping material to distributors. Expectations for a good season are limited by acknowledgement of the realities of the past two years and the present condition of the domestic agricultural scene. Two factors prevail in offering some possible hope: the soil bank program and further overseas shipments.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
109.30	109.30	108.68	110.78

For Current Prices see Page 9

A report from the Agricultural Research Service noted that the use of commercial fertilizers, mixed fertilizers and materials for direct application fell off during the year ended June 30, 1956. Estimated consumption of commercial fertilizers, it was said, amounted to 22,096,000 short tons or a decrease of 2.8 percent; consumption of mixed fertilizers came to 14,749,000 tons, a decrease of 3.9 percent, and materials for direct application were used in the amount of 7,347,000 tons, representing a decrease of 0.4 percent. The tonnage of secondary and trace nutrient materials, of which approximately 85 percent was consumed in the Pacific region, was practically the same as that in 1954-55.

A decrease was noted in the fertilizer consumption of seven of the nine regions of the United States. Slight gains occured in the west, south, central and Pacific regions. Approximately 79 percent of the decrease in total fertilizer consumption occured in the middle Atlantic, south Atlantic and west north central regions, where nearly 45 percent of the tonnage of all fertilizers was used. These three regions also accounted for most of the respective decreases in mixed fertilizers and materials.

Among the individual areas, the east north central region showed the largest decreases in mixed fertilizers (152,000 tons) but this was largely offset by the increase in use of materials (132,000 tons). In only the mountain and Pacific regions was there an increase in the use of mixed fertilizers. However, the mixtures used in these two regions comprised less than 15 percent of the tonnage of all fertilizers used therein and less than 3 percent of the total consumption of mixtures in the United States.

The consumption of fertilizer materials for direct application showed increases in only three regions — east north central (13.3 percent) west south central (1.1 percent) and Pacific (0.5 percent). Of the various classes of materials used for direct application an increase in consumption was shown only by the phosphate products.

Animal and Plant Foods

Ammonium Sulfate—Producers here reported that this material is piled high in inventories. Though in this period, the very earliest stages of the seasonal market, some slight bit of movement is said to be taking place, no marked improvement is anticipated in any short period of time. However, producers said, the next two or three months should offer some movement as the material moves on to distributors. The situation for ammonium sulfate, it was said, is directly related to the fact that nitrogen in its various forms is generally in over supply.

Anhydrous Ammonia—Dealers here reported some slight movement of material toward the distributor market. Anticipation is not high, it was noted, with most producers conceding that if they can bring down some of the oversized stockpiles of material they have accumulated over the past years, they will be well satisfied. Much is contingent, it was said, upon the direction taken by the soil bank program. Also, one producer noted, government buying for export might relieve the situation. The feeling in some quarters is that relief from oversupply might relieve the market of its present tone of urgency.

Animal Proteins—A little better movement was reported in this material last week, dealers here on spot reported. Persisting bad weather has brought some relief through the feed market, while at the same time stemming the growth of the season period that lies in the offing. No new listings were quoted. Blood continued at $5.50 New York and $6.25 Chicago; bonemeal remained at its steady previous level of $60 and tankage stood at $5.25 New York and $6.50 Chicago. The last named figure was slightly light.

Phosphates—Figures on phosphatic fertilizers in the United States during November, according to the Bureau of Census, noted that production amounted to 207,612 short tons as compared with the 207,107 short tons manufactured during October and the 216,397 short tons manufactured during November of the year previous. Shipments during November totalled 145,453 short tons as compared with the 147,749 short tons shipped during October and the 135,294 moved during November, 1955. Stocks on hand at the beginning of the month amounted to 392,967 short tons as compared with the 394,010 short tons for October and the 318,612 for November of the year previous. Stocks on hand at the end of November were tallied at 399,995 short tons against the 392,967 for October and the 333,858 short tons for November, 1955.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced in October, 1956, and corresponding data for the previous month.

	October	September
DDT	10,948,824	11,911,632
2,4-D*	.....	2,317,615
Ester & Salts	1,767,307	1,609,714
Acid equivalent	1,371,668	1,141,828
BHC	6,112,666	6,164,005
Gamma isomer	1,011,709	1,040,016
Tetramethylthiuram suufide	.....	276,794
2,4,5-T	433,691	410,283
Lindane	.....	.....

* Includes 2,4-D acid produced, separated and consumed in plant in the manufacture of its derivatives.

Pesticides

The Department of Agriculture preliminary report on boll weevil infestation noted that though few weevils appeared at present than at similar periods in years previous, hibernating weevils still appear numerous enough to cause early-season trouble. In Louisiana, Mississippi, South Carolina, Arkansas and parts of North Carolina, boll weevil numbers surveyed last fall were below the very high counts of the previous year. However, weather conditions favorable to development of the weevil might possibly bring out damaging numbers this spring. Counts in Virginia, Tennessee and Georgia were higher than in the fall of 1955 but comparable to those in other states. Counts made in Louisiana showed about one-seventh the number found in 1955; Mississippi recorded less than one-half the number for 1955 while Georgia's count more than doubled the 1955 state average and topped the average for the six years that records have been kept.

Bids up until February 15 are invited by COGERGO, 10 Avenue Prince de Liege, Leopoldville-Kalina, in the Belgian Congo. Needed are 75 tons of insecticide powder containing 15 percent toxaphene; 100 tons insecticide powder containing 10 percent toxaphene and 5 percent DDT.

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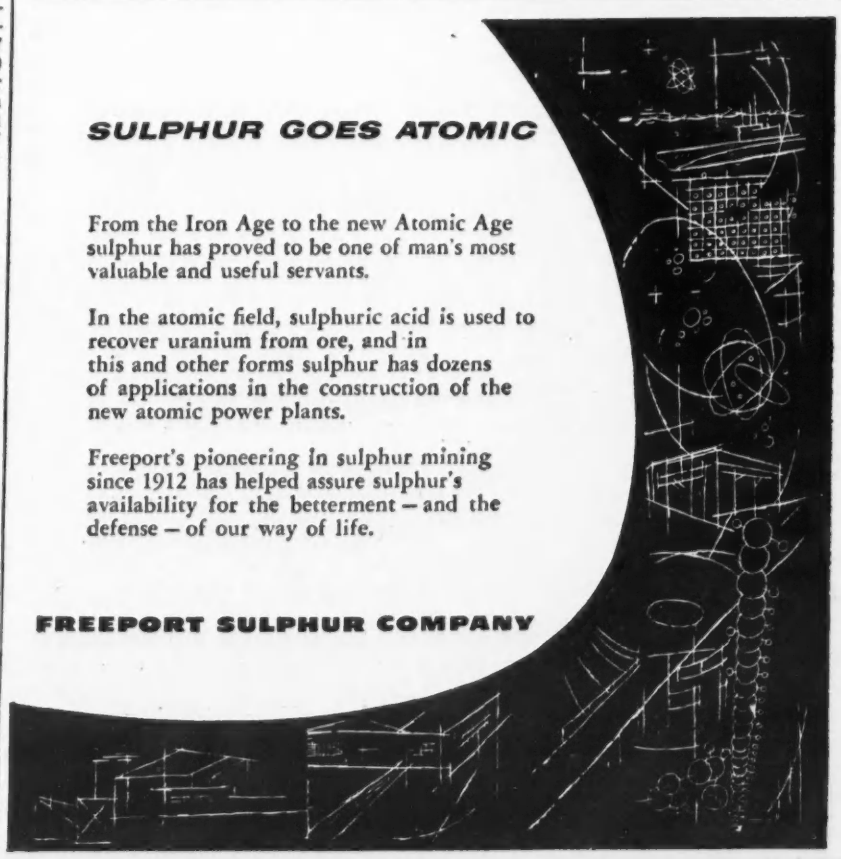

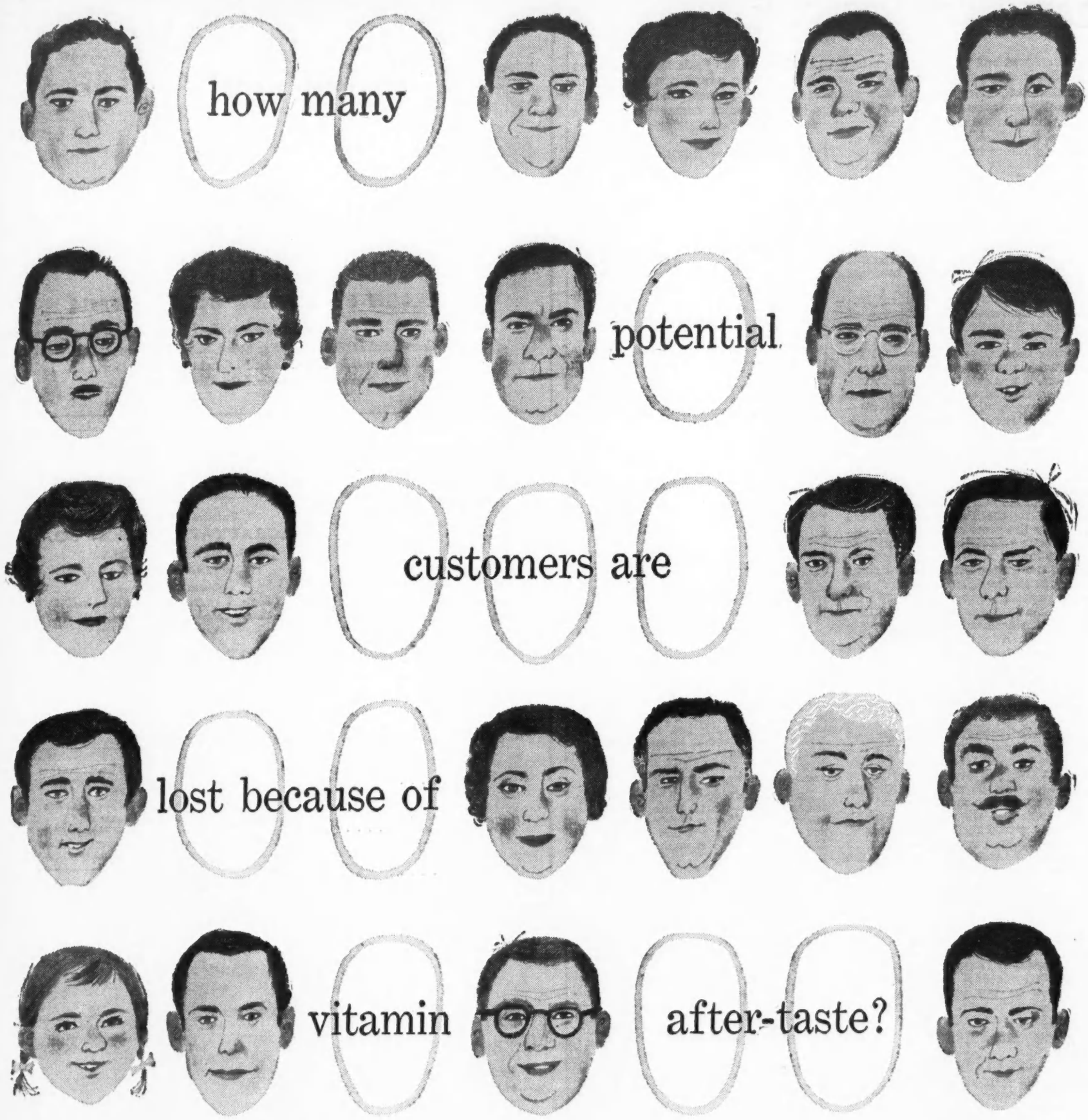

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Drugs, Fine Chemicals

Trade sources indicated that price adjustments on the major antibiotics were still not completed at the close of last week. The advances, instituted some weeks ago by a major producer, consisted of a 1½ cent boost for penicillin salts and a 1 cent increase for streptomycin and dihydrostreptomycin. Demands for antibiotics of all kinds were good. It was noted that neomycin is finding good use in ointments and throat lozenges and may find use in the future in the cosmetic industry. Good trade acceptance was noted for bacitracin salts for use in animal feed supplements.

A producer said that increased costs of raw materials as well as heavy import competition was responsible for the somewhat curtailed production efforts of domestic makers of theobromine. The same producer pointed out that duties on caffeine have been reduced twice and material has been imported in increasing amounts for the past year and a half.

PAS acid and sodium salt were facing tough competition from abroad, it was said, as was the case with isoniazid, another compound that has been used in tuberculosis treatment.

Vitamins continued to be in good demand as well as the minerals used with them in multivitamin preparations. Demands for gluconates and citric acid esters were maintained at seasonally good levels. The essential amino acids were finding good trade acceptance and lysine, for use in fortifying lysine-deficient wheat, was very well received. Bismuth salts for use in stomach preparations were said to be in widespread use.

b-Carotene continued to move in good busine.; volume to margarine producers. Research efforts of recent months have centered around the production of b-carotene using acetone as a raw material in place of the presently used lemongrass oil. The latter is expensive and not always available it was said. The present commercial synthesis of carotene starting with citral, obtained from lemongrass oil, has been used for less than two years.

A producer announced advances in chlorophyll prices last week. Advances were said to be due to increased costs of handling and production. Demands were at a moderate rate and no supply problems were evident.

The reserpine market continued in the same vein as has been noted in previous reports. Inquiry was active it was said since continuing good clinical evidence has been forthcoming during recent months. Prices were unchanged. Some material was said to be on the market at prices slightly less than the $3 quoted by producers.

Acid Thioglycollic—The increase in the use of home permanent kits in recent years was said to have brought about a substantial rise in thioglycollic acid production. Reports indicate that production this year may approach 800,000 pounds. No price changes were anticipated by trade sources.

Ammonium Chloride — USP granular was available from major producers in 250 pound drums priced at 17¼c. per pound. Trade interest was said to be routine and stocks were quite plentiful.

Antibiotics—Trade sources indicated that producers' price adjustments on penicillin, streptomycin and DHS were still not complete at the close of last week. The advances, noted some weeks ago, consisted roughly of a 1½c. boost for penicillin salts and a 1c. increase for strep and dihydro. Neomycin continued to find good trade acceptance for use in ointments and throat lozenges. Reports indicated that markets were in the development stage for use of neomycin in the cosmetic industry while bacitracin salts were in use as animal feed supplements.

Aspirin—Demands were good and supplies adequate and moving to consumers at a rapid pace for use in a wide range of pharmaceutical and analgesic preparations. There was some interest noted in recently marketed liquid analgesics for administration to children and adults who, after throat operations, may have difficulty in taking a pill. The salicylamide suspensions feature a calibrated eyedropper for administering measured amounts of aspirin.

Barbiturates—Prices were firmly quoted after the reductions last month on some of the higher barbituric acid derivatives.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
65.27	65.27	65.25	66.40

For Current Prices see Page 9

Sales volume was maintained at a normal level. The need for barbiturates in mental institutions was said to have declined somewhat in the face of widespread use of tranquilizer drugs such as reserpine and chlorpromazine. Supples were quite ample to handle present trade requirements.

Bromides—Despite the 1c. per pound advance in bromine last week, producers reported no changes in processed bromine salts. Magnesium, calcium and sodium salts were all unchanged in price and at the close of the week dealers indicated that no changes were expected. It was noted that an increase in bromine last summer had no effect on the salts.

Caffeine—Domestic producers continued to be hampered by import competition which has been on the increase for the past year and a half. Informants pointed to the fact that duties had been lowered for the second time last July. A producer cited the increased cost of raw materials as an added difficulty encountered by manufacturers in recent months. Caffeine consumption continued at a normal seasonal level. Good demands were noted from makers of ACP analgesic preparations.

b-Carotene—Producers reported good demands for this synthetic Vitamin A source for use as a coloring and fortifying agent. There was much interest in the research efforts of a major producer centering around a new synthesis of b-carotene using acetone as a raw material in place of the more expensive and not always available lemongrass oil now in commercial use.

Chlorophyll—A producer announced advances in chlorophyll prices last week. Water soluble potassium-sodium copper chlorophyllin, 85 percent to 100 percent purity, 100 pounds or more, was priced at $45 per pound while 70 percent to 84 percent material was $5 les per pound. Water soluble magnesium chlorophyll, 38 pound lots, was $4.25 and oil soluble was quoted at $4.50. Oil soluble copper chlorophyll was priced at $6 per pound. Supplies were adequate and demands steady at a low volume.

Ferrous Sulfate—Supplies were well in hand and demands were steady at a low volume. USP crystalline material was available in drum quantities ranging in price from 9½c. to 10c. per pound. Exsiccated ferrous sulfate in 400 pound drums was priced at 17½c. per pound. Trade sources indicated that market conditions have been much the same for many weeks.

Hormones—Demands were good for the testosterones, progesterone and pregnenolone as well as the synthetic stilbestrol. ACTH was said to be moving in good business volume while hydrocortisone and cortisone preparations in varying potencies continued to be widely used in the treatment of arthritic and rheumatic conditions. It was pointed out that an increasing number of cortisone-aspirin products have been marketed, their value lying in the fact that side effects appear to be diminished but full steroid activity is maintained.

Isoniazid—Domestic producers quoted prices at levels unchanged from previous reports. As with other drug products used mainly for tuberculosis treatment, there was considerable competition from imported material. Demands were routine and supplies plentiful for the modest needs which characterize the trade at the present time.

Phenacetin—Demands were good and supplies quite in order. Consumers specializing in the marketing of analgesic and cold preparations continued to buy

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Drugs, Fine Chemicals

heavily and producers expected to immediate letup in the substantial volume of business which has been transacted during the past few months.

Reserpine—Supplies were adequate and demands consistant with continuing favorable clinical reports of tranquilizers' efficacy in the treatment of certain types of mental illness. Purely on the economic side, it was said that the use of tranquilizers has cut down on institutions' repair costs for such items as window glass, furniture and bed clothing. Prices were unchanged and quoted at $3 per gram. Supplies were adequate and said to be moving in good business volume to pharmaceutical makers for processing into capsule and tablet form for hospital and institutional use.

Sodium Benzoate—Producers noted continuing substantial demands from consumers for both USP and technical material. The latter was said to be finding increased use as a corrosion inhibitor in water based paints. Concentrations of from one-half to two percent, added to water based paints during formulation, were said to be effective in preventing tin plate corrosion. It was suggested that sodium benzoate may provide the most economic answer yet to the problem of tin plate corrosion.

Theobromine—Increased raw materials costs and the growing volume of import competition were said to be responsible for the curtailed production operations of major producers in recent months. A producer noted that technological improvements in the chocolate industry has resulted in increased use and higher prices for cocoa expeller cake, which formerly had few commercial applications other than in the recovery of theobromine and caffeine.

Botanicals

Trading in botanical markets last week was characterized by dealers as being dormant. Seasonal items continued to move through consumer channels at a normal pace. Good interest was being shown in ipecac root and powder and prices were unchanged from levels previously reported. Sales of laurel leaves were reported steady at a low volume.

Dealers again emphasized the fact that the next few months would be months of shortages and high prices on large volume domestic items which have been in perennially critical supply. Stocks of white pine and wild cherry bark, which have been light for many weeks, remain so. Golden seal root was in short supply and dealers continued to quote prices at the high levels which have been prevalent in the trade for some time. Moderate consumer interest was noted for agar and prices on all grades were unchanged from those previously reported. Supplies of imported botanical drug items were better than might be expected what with dealers encountering problems with increased ocean freight rates, crop failures and higher labor costs at foreign sources. Interest in senega root continued active and prices were unchanged from the high levels attained a few weeks ago.

Ipecac Root—Consumer interest was reported good and supplies quite ample at the present time. Prices were unchanged from previously reported levels. Material was moving in good business volume to makers of emetic and expectorant products. Ipecac root was quoted at $7.50 per pound while the processed powder was listed at $7.85. No immediate changes were indicated in the conditions in this market by trade sources queried.

Laurel Leaves—Sales were steady at a low volume. Consumer interest was said to be routine. Supplies were adequate to cover the modest needs which characterize the trade at this time.

Lycopodium—Supplies were somewhat limited. Prices were maintained at the advanced levels noted some weeks ago. Consumer interest in this item was reported moderate and sales were said to be steady at a low level. Dealers price quotations ranged from $3 to $3.50 per pound.

DuPont to Build

—Continued from page 3

be operated by duPont's pigments department.

The department's other titanium dioxide plants—at Baltimore, Md., and Edge Moor, Del.—are both undergoing expansion of facilities to meet the rising demand for the pigment.

A recently developed chemical process for making titanium dioxide, known as the chloride process, will be used at the Johnsonville plant. Raw material will be ilmenite, which will be shipped by rail from duPont's two mines at Starke and Lawtey, Fla.

Titanium dioxide, first produced commercially in this country in 1928, is now being manufactured at a national rate of 425,000 tons a year.

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The first issue of a new quarterly publication entitled **"Ideas in Development"** is being offered to industrial research executives and others interested in research by the chemical division of Armour & Co., 1352 West 31st street, Chicago 9. The booklet is designed to cover the latest developments of the Armour Chemical Division and may be used as a reference source of new ideas.

A new technical service bulletin to assist molders in solving problems involved in the injection molding of polyethylene has been issued by the chemical division of Koppers Company. Entitled **"A Check List for Trouble Shooting Polyethylene Injection Molding Problems,"** it may be obtained by writing Koppers at 1450 Koppers Building, Pittsburgh 19, Pa., and asking for TSB-2-57.

Fritsche Brothers, 76 Ninth avenue, New York 11, has published a **"Pharmaceutical Flavor Guide"** for those concerned with pharmaceutical formulations. Fritzsche expects it to be a boon to the manufacturing pharmacist in making possible quick, easy selection of the best available flavors for a given purpose.

Catalin Corporation of America has published an eight-page booklet on its newest product, **"Antioxidant AC-3."** The descriptive brochure is available from Robert Woodward, advertising manager, Catalin Corporation of America, 1 Park avenue, New York 16.

The American Zinc Institute has published a booklet entitled **"A Review of the Zinc Industry in the United States in 1956."** The publication summarizes the production and consumption picture of the zinc industry as of December 31. Comprehensive tables cover numerous topics. Copies may be obtained from the institute, 60 East 42nd street, New York 17.

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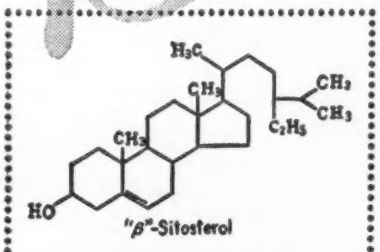

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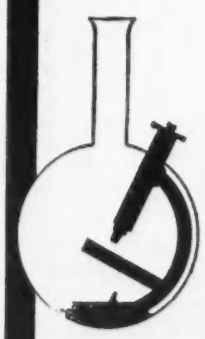

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AMMONIUM BICARBONATE—100 dms, Chemical Manufacturing Co, Liverpool
ANILINE DYES—60 dms, Geigy Chemical Corp, Bremerhaven
25 dms, Ciba Co, Havre
27 dms, Sandoz Chemical Works, Havre
54 bbls, Rotterdam
ANTIMONY REGULUS—50 cs, Antwerp
ARGOL—500 bgs, Tartaric Raw Materials, Naples
ASBESTOS FIBER—337 bgs, Johns Manville Corp, Durban
ASCORBIC ACID—10 dms, Foster T Smith, Yokohama
20 dms, Mitsubishi International Corp, Yokohama
10 dms, Yokohama
BALL CLAY—1,200 bgs, Avonmouth
BARBASCO POWDER—3,000 bgs, Astoria Panamericana, Iquitos
ROOT—531 bls, H A Astlett, Iquitos
BEESWAX—50 bgs, H H Pike & Co, Puerto Plata
200 bgs, S Zeitlins Sons, Santos
38 bgs, Tampico
BENZOIN GUM—40 bdls, Meer Corp, Singapore
32 cs, S B Penick & Co, Singapore
BILE, OX—20 dms, Wilson & Co, Santos
BLEACHING POWDER—75 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—3 dms, Fritzsche Bros, Iquitos
107 dms, Lo Curto & Funk, Iquitos
5 dms, R S Arbib & Co, Iquitos
1 dm, Hecht Levis & Kahn, Iquitos
5 dms, Ungerer & Co, Iquitos
2 dms, Ungerer & Co, Callao
5 dms, Samincorp, Callao
CALCIUM CARBONATE, PRECIPITATED—1,360 bgs, H J Baker & Bro, Avonmouth
FORMATE—455 bgs, Chemical Manufacturing Co, Glasgow
LACTATE—42 cs, Antwerp
NITRATE—709 bgs, McKesson & Robbins, Oslo
CAMPHOR—30 cs, S B Penick & Co, Keelung
OIL—23 dms, Dodge & Olcott, Keelung
CANDELILLA WAX—542 bgs, Tampico
CARAWAY SEED—300 bgs, C M Van Sillevoldt, Rotterdam
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800 bgs, Rotterdam
CARBON, ACTIVATED—161 bgs, D C Andrews, London
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112 bgs, Frank B Ross, Fortaleza
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CERIUM OXIDE—2 cks, Havre
CHESTNUT EXTRACT—2,300 bgs, Barkey Importing Co, Genoa
CHINA CLAY—896 bgs, English China Clay Sales Corp, Avonmouth
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2 dms, Interocean Chemical & Minerals Corp, Yokohama
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FISHMEAL—1,382 bgs, Marine & Animal By Products Corp, Callao
FUEL OIL—91,864 bbls, Central Petroleum Corp, Punta Cardon
71,103 bbls, Shell Oil Co, Curacao
65,303 bbls, Esso Export Corp, Las Piedras
173,000 bbls, Esso Export Corp, Aruba
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555,000 bbls, Esso Standard Oil Co, Aruba
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LIME OIL—2 dms, Citrus & Allied Essential Oil Co, Puerto Plata
LITHARGE—630 dms, Eagle Picher Co, Tampico
LIVER POWDER—30 dms, Tec Chemical Corp, Montevideo
LOCUST BEAN—300 cs, S B Penick & Co, Larnaca
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243 bgs, Shippers Produce Corp, Tandjong Priok
35 bgs, H M Newhall & Co, Singapore
51 bgs, Greene Trading Co, Port of Spain
28 bgs, Wm E Martin & Sons, Singapore
165 bgs, Rotterdam
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OLIVE OIL—54 dms, J Ossola Co, Haifa
54 dms, Colivo Packing Co, Haifa
135 dms, Uddo & Taormina, Haifa
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50 dms, Unanue & Sons, Marseille
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25 dms, Makris Bros, Marseille
50 dms, Unanue & Sons, Tunis
25 dms, De Sieone Bros, Tunis
50 bbls, Magnus Mabee & Reynard, Marseille
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ORANGE OIL—8 dms, Citrus & Allied Essential Oil Co, Puerto Plata
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187 tons, Procter & Gamble Co, Matadi
PALMKERNEL OIL—394 tons, Matadi
PAPAIN—27 cs, American Ferment Co, Matadi
33 cs, Matadi
PAPAYA LEAVES—5 bls, Herbarium Inc, Calcutta
PAPRIKA—536 bgs, Rijeka
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420,368 bbls, Socony Mobil Oil Co, Puerto La Cruz
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SOLELIVER OIL—3 dms, Consumers Import Co, Yokohama
STARCH—122 bgs, Federal Adhesive Corp, Rotterdam
STRAMONIUM LEAVES—115 bls, Rijeka
TANNING EXTRACT—32 dms, Geigy Chemical Corp, Bremerhaven
TAPIOCA—259 bgs, Manhattan Paste & Glue Co, Penang
FLOUR—4,000 bgs, Internatio Rotterdam, Bangkok
9,670 bgs, Stein Hall & Co, Bangkok
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10,915 bgs, Morningstar Nicol, Bangkok
300 bgs, Manhattan Paste & Glue Co, Bangkok
600 bgs, Harry F R Dolan Jr, Bangkok
1,080 bgs, Bangkok
TARA POWDER—938 bgs, Salaverry
TARTARIC ACID—200 bgs, Nylos Trading Co, Genoa
TRICHLOROETHYLENE—125 dms, Chemical Manufacturing Co, Liverpool
9 dms, Ayerst Lab, Liverpool
TRIHYDROXYBENZENE—10 kgs, D F Young, London
TUNG OIL—19 tons, C Tennant Sons & Co, Buenos Aires
133 tons, Buenos Aires
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Liverpool
VITAMIN C—24 dms, Byco Ltd, Kobe
WATTLE BARK—1,250 bls, John Holt & Co, Mossel Bay
1,111 bls, Capetown
WOOL GREASE—205 dms, N I Malmstrom, Manchester
70 dms, W J Byrnes & Co, Nagoya
YLANG YLANG OIL—1 ck, Havre
ZIRCON SAND—1,200 bgs, International Titanium Corp, Brisbane
2,500 bgs, Lo Curto & Funk, Brisbane

Los Angeles

CALCIUM NITRATE—4,000 bgs, Antwerp
CASEIN—150 bgs, Tupman Thurlow, Buenos Aires
250 bgs, Buenos Aires
CASTOR OIL—104 dms, Pacific Vegetable Oil Corp, Buenos Aires
COPRA—8,240 bgs, Balfour Guthrie & Co Inc, Manila
8,960 bgs, Pacific Vegetable Oil Corp, Manila
898.00 long tons, Procter & Gamble Co, Dumaguete
1,003 tons, Procter & Gamble Co, Nasipit
4,285 tons, American Trust Co, Legaspi
1,500 tons, Procter & Gamble Co, Tacloban
8,000 bgs, Pacific Vegetable Oil Corp, Cebu
1,240 bgs, Balfour Guthrie & Co, Iloilo
6,720 bgs, Procter & Gamble Co, Manila
2,240 bgs, Wilbur Ellis Co, Manila
709 tons, Cebu
6,720 bgs, Atkins Kroll & Co, Zamboanga
CORIANDER SEED—200 bgs, B C Ireland, Rotterdam
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—Continued on page 61

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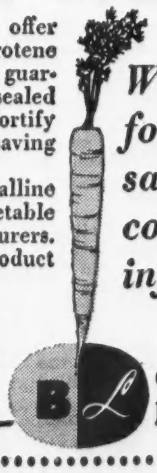

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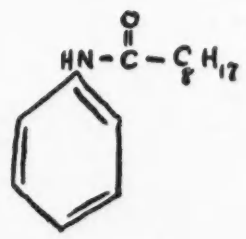

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Ass't Treasurer and Ass't Secretary

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Essential Oils, Aromatics

Movement of any importance in this market last week was limited, dealers here reported. Price shifts were noted for three oils: geranium, palmarosa and spearmint. Geranium oil, Bourbon quality, was the only material to advance. The new listing, $15 per pound or 75 cents higher than previously quoted, was attributed to a tight supply situation at source. Algerian material remained untouched in price but it is assumed that it will advance with the anticipated rise in demand. Palmarosa declined for the second time in as many weeks. The movement is attributed to earlier downward shifts in the source market with the resultant moves on the parts of spot dealers to bring their prices down to a level with the source listings. The new quote is $6.75 per pound or 25 cents less than previous. Spearmint fell 15 cents per pound last week. This is attributed to the heavy supply of material that came to the market with the newcrop late last fall.

A recent report from London noted that Grasse flower crops have in general suffered from the severe cold of last February. The orange flower crop, which had been expected to be about 800 tons, was practically wiped out; there was no mimosa, compared with 54 tons treated at Grasse in 1955. On the other hand, the May rose crop was 718 tons, as against only 380 in 1955, and jasmine, at 682 tons, although less than 1955 (757 tons) was slightly better than in 1954. All these figures refer to metric tons. Fortunately, Grasse does not rely entirely on local flowers, and considerable quantities of imported raw materials are converted into essential oils, a notable instance being that of North African orange flowers, the entire production of which is controlled by Grasse interests, and this has been of especial value in the present disastrous season for the Grasse growers.

The turnover of business at Grasse in 1955, according to the London report, amounted to 11½ million francs (the franc is presently quoted at .00285⅞c.). Exports to the United States and Canada were 2 million francs; to the British Empire, 1½ million francs; to Eastern Europe and Asia, 1 million francs; and to other countries, 3½ million francs. This total of 8 million francs was more than four times the value of the perfume industry's raw materials; in addition, Grasse supplied nearly all the raw materials to the French perfume industry, whose exports of finished products amounted to more than 9 million francs. Unfortunately, it was noted, the first half of 1956 produced less favorable exports, following, whether by coincidence or not, the reduction in the amount of French government aid to exporters.

Price Trends

Advanced

Oil, geranium, Bourbon, 75c. per lb.
Vanilla bean, Bourbon, 50c. per lb.

Reduced

Oil, palmarosa, 25c. per lb.
Spearmint, 15c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
145.48	145.40	138.25	135.36

For Current Prices see Page 9

Essential Oils

Bergamot—The new price for this oil has been fixed by the Consortium and will be about 12 percent higher than the 1956 figure, according to a report from London. This is attributed to higher production costs, also the previous price was made as low as possible to try and win back some of the trade lost in previous years. Now with the newcrop production and no carry over stock for this season, new prices have accordingly been increased.

Geranium—Bourbon quality material advanced in price last week, dealers here reported. The new listing, about $15 per pound is 75c. higher than previous quotes. Reports from the primary center, according to one source, indicate a very tight supply situation with heavy orders in the final quarter of last year having cut into supplies. The oil goes into the manufacture of perfumes, cosmetics and soaps. While prices for Algerian geranium oil remain unchanged, the oil normally follows the trend set by Bourbon oil.

Lemon—New crop Sicilian lemon oil, according to a London report, is quoted a little higher on old crop figures in the foreign market. The crop is late this season and at present there is a certain fluctuation in the quotations. Citrus oils are in a generally firm position dealers here reported, with stocks, particularly in the case of California orange and distilled lime oil, in small supply. Inquiries and orders are reported increasing in volume.

Lime—Dealers here continued to report last week that the market for this material remained firm on the spot scene. Production, it was noted, is sold ahead in Mexico and no relief in the tight supply position can be expected until May or June or until new production gets underway. Spot prices for distilled material were maintained at $5 to $5.25 per pound. Much of the lime oil, dealers noted, goes into the beverage and confectionary trades.

Palmarosa — This material declined further in price last week, dealers here reported, as their efforts continued to bring the spot price into line with the source area listing. This material, Turkish geranium oil, has ben offered at the primary markets for reduced rates for some time. The present quote, $6.75 per pound, is 25c. per pound less than the previous listing and the second price reduction to take place in the same number of weeks.

Spearmint—This material fell on spot last week, dealers here reported. The current listing of $4.25 per pound is 15c. less than previouly quoted. Thse condition of this material has not been strong since the introduction of the newcrop into the market. Even prior to this, government production estimates had foretold the large crop that might be expected. The soft tone persisted for spearmint oil despite several exterior factors working in the market. Though the tide was held by these other factors, for some little time, eventually the bulk of material remaining available had to be felt. The present decline in price is the first obvious intimation of that material.

Aromatic Chemicals

Anethol—Dealers and producers here reported this material to be in a somewhat slightly better supply position than it had been previously. Earlier, as the result of loose supply positions, the price was declined 10c. per pound for NF material while the technical grade remained chained to its previous listing of $1.10 per pound. The situation that brought the loose supply about was said to be an export market setback that developed because of a liberal anise oil offering in the European market. The situation is not expected to tighten up to any great degree until a quantity of the natural material is consumed.

Citral—This material, according to dealers and producers on spot, continued to display an unsettled tone. This was attributed to recent irregular fluctuations in the basic material from which it was derived. Further movement in that area, it was said, might bring about a price shift. However, firming tones in the source stuff on some levels was noted and it was felt that the source material market, consistently one of the strongest in the essential oils field over the past years, would move to firmer and more stable positions.

Seeds and Spices

Last tweek, according to one dealer, saw differentials reemerging and spot developed premiums partly because of the possibility—however slight—of a dock strike on or about February 8. The general advance of about 1c. is modest enough, it was noted, but active trading accompanied each fractional gain and this gave the market a cheerful appearance in comparison with the prolonged aimless wallowing of the last months. Statistically nothing much has changed. Technically the market was due for an improvement which was bound to be as gradual as the decline which preceded it. The spot position has been lightened considerably since October and present holdings are in fewer hands, holders

Essential Oils

apparently being determined to put some basic sense back into trading. This occurred none too soon, for the number of active traders had shrunk to little more than a handful. With Lampong and Sarawak above Malabar, India determines the market, reflecting each improvement but giving ground as soon as New York interest slackened. The patter for the next few weeks seems to indicate an absence of spectacular changes, the trade being rather inclined to expect a succession of higher rally lows as the peak pressure of Malabar recedes and the rather limited consumer inventories and small forward purchases tend to favor buying at the dips. The most important point seems to be, however, the new breath of optimism present.

Cloves—Importers here are reportedly having more difficulty getting arrivals clean enough to pass Food and Drug requirements. Aside from the delay that has occurred, there is a possibility that cleaning costs may have to be increased. Otherwise the market is said to be steady with supplies available not overly large. The position of the spot dealer, that of trying to hold a stable market between the frying pan and fire of the Food and Drug authorities and the indifferent source sellers, not nothing new and certainly not limited to the cloves market alone. It is a problem that the local dealer has been confronted with for some years without ever really finding a complete answer to his problem. With the trend toward greater and greater regulatory control, it would behoove the industry to ponder this problem.

Coriander Seed—A recent report on coriander seed noted that the average annual imports amount to 1,000 tons. The bulk originates in Morocco, with the balance coming from Rumania, Yugoslavia and smaller quantities occasionally coming out of Argentina. Quality-wise, it was noted, a higher oil content is found in the smaller Argentine, Rumanian and Yugoslavian seed.

Morocco markets the bulk of its coriander seed in India and Ceylon where 2,000 to 3,000 tons a year are consumed and where import restrictions such as the F.D.A. here are non-existant. All countries have in recent years abandoned the condition to sell with a guarantee to pass and importers, therefore, are calculating this risk themselves. During the last 12 months, all coriander seed arriving in the United States was detained by the F.D.A. Total import arrivals for 1956 amounted to:—

Morocco	445 tons
Rumania	280 tons
Argentina	25 tons

This gives a total of about 750 tons which is below average. The reason for this is the fact that about twelve months ago, importers had 100 to 200 tons of coriander seed in stock, about equally divided betwen Moroccan and Rumanian.

They neglected to replace their sales until the Moroccan market increased sharply from 7½c. to 9½c. per pound, New York, in August of last year, due to heavily increased demand from Ceylon and India.

The last campaign in the growing areas resulted in a fairly good crop and supply and demand in the United States appeared to be in balance. However, coriander seed, like cassia, is one of the articles in the industry where the importers usually have not been able to get a fair return on their risk and investment since they face not only the cost of reconditioning, which today amounts to about $1.85 per 100 pounds, including trucking, but also the loss in weight which varies from lot to lot and can add easily another ½c. to 1c. per pound to the importers basic cost. While demand and supply are about balanced the current price in the New York market of 10¼c. to 10½c. for Moroccan coriander seed and 9½c. for Rumanian coriander seed is just sufficient to return to the importers their actual cost plus a nominal profit. Failure to pay the importer a reasonable return may again cause local shortages when consumer demand makes itself felt in the early spring in anticipation of the summer season.

Gingers—New Crop Cochin has arrived on spot, it was reported last week, and is available at reasonable rates. Other grades, it was said, are somewhat lightly stocked. Very little has been done in newcrop African, Jamaican or Nigerian because the general level for these grades is above the Cochin price.

Mace—This material and nutmeg have been quiet during the past week, it was reported. There was no pressure to sell from Granada or Indonesia. Current levels have restrained buying and thus, one dealer noted, the spot market fails to reflect replacement costs. The spot market is said to be thin and any inquiry of importance might bring a radical change to it.

Vanilla Beans—Further movement was reported in the Bourbon listing of this material. The new quote, an $8.50 to $9 per pound range, is 50c. higher on the inside than previous prices. Dealers suggest that the movement was brought about by good demand on spot and the likelyhood of a tight supply situation in the near future. While there is no change in the Mexican vanilla bean price, advices from the primary center indicate that producers will probably endeavor to obtain higher prices for newcrop goods on the basis of the high levels that have been paid for newcrop green beans by the curers.

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Coatings Materials

Red and black copper oxide have followed the basic metal in a 2c. per pound price decline. Latest quotations of black oxide are 51½c. per pound for quantities of 100 to 1,999 pounds, 50½c. per pound for 2,000 pounds to minimum truckload, and 49½c. per pound for truckloads. U. S. Navy Type I red oxide is 62½c. per pound in lots up to 5,000 pounds, 61½c. in lots up to 39,900 pounds, and 60½c. in larger quantities. Comparable prices of Type II are respectively, 60½c., 59½c., and 58½c. per pound.

In some quarters it is believed that the latest reduction in copper metal, which brought the price down to 34c. per pound, is inadequate, in view of evidence that supply of the metal is outstripping demand. In the outlook of these observers, either the price must decline further, or substantial cutbacks in production must be made. They recall that when the market weakened last October, prices were temporarily steadied by a curtailment in production amounting to 4,000 tons per month.

Quotations of cobalt oxide were steady at the lower levels posted a week ago. Drastic reductions in the price of this material are said to have stemmed from discovery of heavy deposits of ore in the congo and the need to expand the market accordingly.

Business volume in synthetic resins and plasticizers was good last week, but trading in most of the prime pigments was only moderate. Buying in the paint trade was still seasonally low, but other consumers of lead and zinc pigments were beginning to show more interest. While the shellac market remained quiet, the downturn in prices was halted by a steadier trend at the source. Previously prices had been depressed by a climbing supply level. Sales of casein increased last week, thereby helping to lift the price upwards by ¾c. per pound. Because of unfavorable weather conditions for production and shipment, the outlook in the Argentine is said to be firm. The presently heavy supplies are said to be no cause for worry, as the end of the production season is approaching.

Trading volume in gum rosin during January showed a slight gain over the previous month but was still generally on the light side, the Department of Agriculture reported last week. The turpentine market remained firm during the month under a reduced volume of sales, the Department said. Further details from this report are given below under "Naval Stores."

Price Trends

Advanced

Casein, ¾c. per lb.

Reduced

Copper oxide, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
100.77	100.77	100.79	100.08

For Current Prices see Page 9

Prime Pigments

Cadmium Colors—Selenides were moving promptly at the reduced levels announced a while back. The price reduction and the more adequate supply level are both results of increased availability and a correspondingly lower price quotation of selenium metal. This development came about through curtailment of the government's stockpiling program. Mercury lithopones are in ample supply, with quotations unchanged from the levels established when the materials were introduced.

Cobalt Oxide—Prices were unchanged at the substantially lower levels posted a week ago. Quotations are $1.52 per pound for 72-73 percent material and $1.48 per pound for 70-71 percent oxide. These levels are respectively 26c. and 25c. per pound lower than previous listings.

The drastic price reductions in this material are said to have stemmed from discovery of heavy deposits of ore in the Congo and the need to expand the market accordingly.

Copper Oxide—Red and black oxide followed the basic metal in registering a 2c. per pound price decline last week. Latest quotations of black oxide are 51½c. per pound for quantities of 100 to 1,999 pounds, 50½c. for 2,000 pounds to minimum truckload, and 49½c. per pound for truckloads. U. S. Navy Type I red oxide is 62½c. per pound in lots up to 5,000 pounds, 61½c. in lots up to 39,900 pounds, and 60½c. in larger quantities. Comparable prices of Type II are 60½c., 59½c. and 58½c., respectively.

Some consumers have declared that the latest decline in copper metal, making the price 34c. per pound, is inadequate in view of evidence that supply is far in excess of demand. In the outlook of competent observers, either the price must decline further, or substantial cutbacks in production must be made. When the copper market weakened last October, output was curtailed by almost 4,000 tons a month, which tended to steady the price.

Carbon Black—The following figures, in thousands of pounds, indicate production, shipments, stocks and exports of carbon black for December, 1956, with figures for November, 1956, and December, 1955, reported for comparison:—

Production

	Furnace	Contact	Total
December, 1956	122,187	30,459	152,646
November, 1956	122,893	29,621	152,514
December, 1955	123,107	32,182	155,289

Shipments

December, 1956	118,391	36,323	154,714
November, 1956	95,063	25,444	120,507
December, 1955	113,466	30,857	144,323

Stocks

December, 1956	260,318	77,510	337,828
November, 1956	256,522	83,374	339,896
December, 1955	132,748	96,328	229,076

Exports

December, 1956	*	*	*
November, 1956	12,516	8,928	21,444
December, 1955	22,831	15,071	37,902

* Not available.

Lead Pigments—Production and shipments of dry white lead were seasonally lower in November, the Lead Industries Association reported recently. Production was 1,150 short tons, as compared with 1,547 tons in October and 1,821 tons in November of the previous year. Shipments declined to 1,125 tons from 1,418 tons in October and 1,145 tons in November 1955. December 1 stocks rose to 2,117 short tons from 2,092 short tons on November 1. On December 1 of the previous year stocks stood at 2,522 tons.

Production of white lead in oil dropped to 365 short tons in November from 378 tons the month before, and 510 tons in November 1955. November shipments were 279 tons, as compared with 425 tons in October, and 314 tons in November 1955. Stocks on December 1 totalled 942 tons as against 856 tons on November 1 and 1,154 tons on December 1 of the previous year.

Titanium Pigments—Exports of these pigments in October amounted to 9,828,835 pounds, 3,932,800 pounds of which were shipped to Canada, the remainder moving to approximately 40 different countries.

Many consumers have felt that an increase in titanium prices is in the works and reportedly have built up inventories accordingly. This would explain the supply squeeze experienced a few weeks ago. But at least one producer has now assured customers that orders will be shipped at the price prevailing at the time the order is accepted, provided shipment is made not later than during the month following the month in which the order is placed. This guarantee has slowed down the run on supplies, producers reported.

Natural Resins

Dammar Gum—Consuming interest was limited to immediate requirements. Quotations were firm in reflection of forthcoming advances in freight rates on the Far East route.

Gum, Copal—Business volume was seasonally moderate and stressed immediate requirements. Supply levels were still adequate for all market needs. Prices held steady, with Manila grades quoted as follows:—Manila C, 35½c. to 39c. per pound; CBB, no stocks; DBB, 26c. to 28½c. per pound; MA, 18½c. to 21c. per pound; and WS, no stocks.

Shellac—Although buying remained quiet last week, the downturn in prices has been halted by a steadier trend at the source. Previously, prices of orange grades were squeezed down about 6c. per pound because of a climbing supply level

Coatings Materials

at the source. Bleached shellac is also steady at quotations that were lowered 2c. per pound a month ago.

Miscellaneous

Casein—Increased call for Argentine material coming at a time when the production season is nearly at an end resulted in a price advance of ¾c. per pound last week. Because of unfavorable weather conditions for production and shipment, the outlook in the Argentine is said to be firm. New Zealand casein was unchanged in price at 25c. to 26c. per pound. Adequate quantities were available for forward shipment. Domestic production was limited to specialty needs in small quantities.

Stearates—Prices are steady at the following listings in carlots: aluminum stearate, 39c. per pound; barium stearate, 41c. per pound, and calcium stearate, 39c. per pound. Less than carlot quantities are 1c. to 5c. per pound higher. These quotations reflect advances in stearic acid and other raw materials.

Naval Stores

Trading volume in gum rosin showed a slight gain in the month of January but was generally on the light side, the Department of Agriculture reported last week. Export business gradually fell off as the month progressed, the Department said, owing primarily to a squeeze on shipping space for bookings through March. In addition, some foreign importers were said to have made an erroneous calculation that the Commodity Credit Corporation offer and bid program for export would have the effect of reducing procurement prices drastically. The Department explained that this program last year did not result in excessively low prices as compared with domestic offerings—in fact, prices remained above world competitive levels—but the same low-bid situation developed and ran its course following announcement of the program.

Domestic rosin trading during January showed mixed price trends. Toward the close of the month buying interest improved in both bags and drums, with WG quotations closing higher than in the previous month. Medium grades in drums declined in price on a relatively small volume of sales, while hot rosin in tankcars averaged 2c. to 9c. higher on slightly reduced volume, the Department reported. Dealers' unsold stocks of grades WW and WG from production of the current crop year were reported extremely low at the end of the month; mediums and undergrades from a comparatively good scrape crop were judged fully adequate.

The weighted average price of all grades on 4,664 drums, f.o.b. plants, was $8.54 as compared with $8.62 for the previous month and $8.64 for January, 1956. Total reported sales volume of 14,973 drum equivalents was 708 drums more than in the previous month but 6,839 less than during January, 1956. Export sales of 4,795 drums were 572 drums above the volume of the previous month and 542 drums less than the level reported for January, 1956. Domestic drums sales constituted 31.2 percent of the total reported, bags 11.2 percent, hot rosin 25.6 percent and exports 30.0 percent, according to the Department.

The turpentine market remained firm under less trading activity than the substantial volume scored the previous month, the Department reported. Sales volume in tankcars was about unchanged, while average prices edged fractionally higher. Some of the turpentine taken off the market during the peak of the storing period for addition to stored scrape and the turpentine component of the scrape itself can be expected to be retrieved soon, as most of the hot rosin requirements will have to be supplied from these stored stocks, the Department said. Part of this material, even before distillation, already has been sold, but some of the balance may appear on the open market to ease slightly the tight supply situation before the appearance of heavy spring demand.

The export outlook in turpentine was described by the Department as still favorable, but with the qualification that tank steamer arrivals are running far behind schedule.

Over-all turpentine sales were reported at 114,275 gallons, a decline of 624,343 from the previous month and a drop of 273,040 from the level of January, 1956. Sales of CCC owned stocks during January totaled 1,247 drums of rosin—620 drums of WW, 150 drums of WG for domestic use; 412 drums WW, and 65 drums of WG through competitive bids for export use—and 4,000 gallons of turpentine. CCC stocks on hand at the close of January amounted to 514,491 drums of rosin and 563,751 gallons (or 11,275 barrels) of turpentine.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Feb. 1	Mon. Feb. 4	Tues. Feb. 5	Wed. Feb. 6	Thur. Feb. 7
Drums—					
M	...	$8.02§	...	...	...
N	$8.05	8.17§	...	...	...
WG	8.70	8.85	$8.65	$8.68	...
WW	...	8.89	...	...	...
Bags—					
M	...	...	...	8.00	...
N	...	...	...	8.46	...
WG	...	...	...	8.55	...

Tankcars (for week ended Febraury 1)—M or better, $7.81§; K or better, $7.875.

Sales USDA				
240*	1,688*	160*	721*	160*

New York

(per 100 lbs., c.l., Friday)

WW, $10.40; WG, $9.70; N, $9.60; B through M, $9.35.

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	.5825§	...	...	.58
Sales	...	8,000¶	...	...	4,000¶

New York, Friday, per gal., 7 lbs., tankcars, 67c., l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price.

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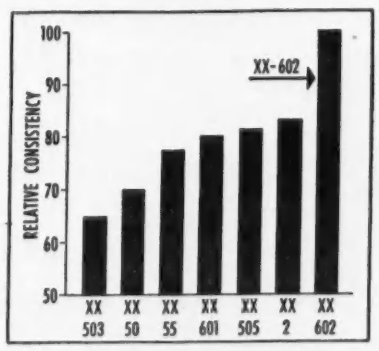

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Organon Makes Ericson Head of Clinical Promotion

Organon, Inc., Orange, N. J., has appointed Kenneth N. Ericson director of clinical promotion. Mr. Ericson was formerly with Alba Pharmaceuticals and with Sandoz Pharmaceuticals, Inc. While associated with the latter, he rose to assistant to the medical director. At Organon, Mr. Ericson will head up the clinical promotion and professional service departments.

Drug Test

—Continued from page 7

million, also will be used for increased scientific research on nutritional qualities of foods, on present testing methods for drugs, on efficacy of new cosmetic ingredients, and for increased factory inspection work.

Clinical testing has been employed in the past by the FDA, but only sparingly because of lack of funds. Reliance for the safety and efficacy of a product has been placed largely on such tests as were made by the manufacturers to support their new drug applications.

However, even after the safety of new drugs has been established, by animal testing and by clinical evaluation and before commercial distribution, Mr. Harvey explained, it sometimes happens that when a product is released for nationwide use and is administered to thousands, or even millions of patients, untoward reactions occur that were not possible to predict by the extended preliminary experiments.

He said it is urgent, therefore, that there be increased attention given to new drugs after their commercial distribution has been started. He said that to meet this necessity limited clinical studies of the drug will be made in some cases by the staff of the FDA or by phyicians under contract with the FDA.

Butadiene Process

—Continued from page 7

over other catalysts now in use, Dow says. The company also estimates that considerable savings in capital and plant equipment will result from its use. With modification of equipment, the catalyst can be used in butadiene manufacturing plants now in operation.

Dow is presently building a plant in Ludington, Mich., to produce this catalyst.

In addition, a semi-plant has been built by Dow at Freeport, Tex., to continue research and development on this process which converts butylene petroleum fractions to butadiene by dehydrogenation. This unit was recently placed on stream.

Jobs & People

American Pharmaceutical Company, New York—**H. S. Gould,** vice-president, has left for a business trip to the various countries of Central America.

Bakelite Company, New York, a division of Union Carbide & Carbon Corporation—**R. R. Payne, jr.,** has been made technical representative in the Hartford, Conn., district sales office.

Bristol-Myers Products Division, New York—**Edward Gelsthorpe** has returned to the division as assistant vice-president and director of merchandising, after having been with J. Walter Thompson Company.

Diamond Alkali Company, Cleveland, Ohio—**Robert E. Frey** has been appointed to the position of assistant works manager in charge of operations at the company's Painesville Works, succeeding **Arthur B. Tillman,** who was recently named operations manager for the electro chemicals division.

General Electric Company—**George A. Darsie** has been appointed eastern district sales manager for the silicone products department, and will have his headquarters at 254 Elizabeth avenue, Newark, N. J., one of the ten sales offices of the department throughout the country. **John F. Blumenfeld** has been appointed development engineer at GE's chemical development department in Pittsfield, Mass.

Chas. Pfizer & Co., Brooklyn, N. Y.—**Edward F. Bouchard** has been appointed assistant director of the technical service department and **Arthur F. Leyden** has been named to succeed him as manager of the department's pharmaceutical section.

Texas Company, New York—**William G. Copeland** has been named general manager of the refining department, succeeding **Theodore A. Mangelsdorf,** who recently was elected a vice-president. **Lee R. Hays** has been appointed to represent the company in the midwest in selling anhydrous ammonia and nitrogen solutions for agricultural use.

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Petroleum Derivatives

Daily average production of natural gas liquids in November was estimated last week by the Bureau of Mines as 33.9 million gallons—three percent greater than in November of the previous year. Demand for liquefied gases in fuel and chemical processes declined two percent from the level of a year ago, the Bureau said, while stocks increased 244 million gallons to 699 million gallons. In other data issued by the Bureau, stocks of propane and butane showed a normal seasonal decline in November, reflecting high consumption as heating fuels.

Higher prices of aliphatic solvents, announced three weeks ago, are steady and unchanged. Since announcement of the price increase, those customers who have extra storing space have been buying heavily, as contracts assure thirty days delivery at the previous prices. Benzol and other byproducts of steel manufacture were unchanged in price, and in the opinion of some trade sources, show promise of remaining steady through the quarter. Petroleum industry inventories were adequate for all solvents, but in the cokeoven field, xylol has been intermittently tight in recent months.

Solvents and Diluents

Aliphatic Solvents—The new prices announced a few weeks ago are steady and unchanged. The advances brought East Coast prices 1c. per gallon higher and those on the West Coast ½c. per gallon higher.

Since announcement of the price increase, customers with extra storing space have been buying heavily, as contracts assure thirty days delivery at the old prices.

Benzol—Imports of benzol in November amounted to 6,083,044 gallons for a total of 63,882,855 gallons for the first eleven months of 1956. October imports were reported at 8,908,975 gallons. Exports during the first eleven months of last year totalled 2,459,408 gallons, of which 31,436 gallons were shipped in November.

Benzol production in the petroleum industry declined to 9,989,653 gallons in November from 11,235,936 gallons the month before, the Tariff Commission reported. Total output during the first eleven months of the year was reported at 103,834,106 gallons. With cokeoven production added to these figures, total benzol output works out to 31,170,842 gallons for November, 32,232,357 gallons for October, and 297,067,648 gallons for the first eleven months of the year.

Toluol—Average octane levels of automobile gasoline rose again in January to a new high, it was reported last week. Both regular and premium octane averages advanced .1 during the month to levels of 90.5 and 97.4, respectively. In January of the previous year octane averages were substantially lower at 89.2 for regular and 96.2 for premium. Premium gasoline with octane number higher than 98 were reported in 11 cities this month. Regular gasolines higher than 91 octane were reported in some 17 cities. These data serve to underscore the expanding use of toluol as a gasoline enrichment.

Toluol exports increased in November to 12,267,993 pounds from 846,328 pounds in October, according to a report of the Bureau of the Census. The total for January through November was 56,561,814 pounds.

Production of toluol in November was reported at 16,157,697 gallons, of which 12,794,423 gallons were produced by the petroleum industry. Comparable figures for the month previous were substantially the same at 16,150,757 gallons total, and 12,732,871 for petroleum producers. During the first eleven months of the year total for all sources was 159,192,840 gallons, with the petroleum industry contributing 125,480,689 gallons.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended January 19 totaled 256,278,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 259,657,000 barrels for the preceding week, this represents a decrease of 3,379,000 barrels, comprising a decrease of 2,647,000 barrels in stocks of domestic crude and a decrease of 732,000 barrels in stocks of foreign crude.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
107.64	107.64	105.71	104.37

For Current Prices see Page **9**

Xylol—According to the Tariff Commission, production of this solvent amounted to 11,208,820 gallons in November, as against 12,540,655 gallons in the previous month. During the first eleven months of the year, 115,547,541 gallons were produced.

Lighter Fractions

The daily average production of natural gas liquids in November has been estimated by the Bureau Mines as 33.9 million gallons—three percent greater than in November of the previous year. Demand for liquefied gases in fuel and chemical processes declined two percent from the level of a year ago, the Bureau said, while stocks increased 244 million gallons to 699 million gallons. As compared with the October, 1956, level, stocks showed a 52 million gallon decline in November.

Butane—Output at plants in November was 123,084,000 gallons, while refinery production reached 35,742,000 gallons for a total of 158,826,000 gallons, according to a report of the Bureau of Mines. On November 30 stocks at plants, terminals and underground totalled 154,783,000 gallons, as compared with 183,469,000 gallons on October 31. Refinery stocks stood at 27,594,000 gallons on November 30, as against 28,938,000 gallons October 31. Deliveries for gasoline use during the month were reported at 121,869,000 gallons. Shipments for other uses amounted to 66,987,000 gallons.

Propane—Production of this gas at plants in November totalled 271,696,000 gallons, while refinery production reached 94,416,000 gallons, for an aggregate of 366,112,000 gallons, according to the Bureau of Mines. On November 30, stocks at plants, terminals and underground stood at 459,861,000 gallons, as compared with 481,560,000 gallons on October 31. Refinery stocks added up to 27,594,000 gallons on November 30, as against 28,938,000 gallons on October 31. Deliveries for gasoline use during the month were reported at 2,058,000 gallons. Shipments for other uses amounted to 386,971,000 gallons.

Miscellaneous

Crude Oil — Current reports for the week ended January 18, 1957, indicate an increase in crude-oil production and a decrease in crude runs. According to the A.P.I., the daily average output of crude (including lease condensate) was 7,431,000 barrels, an increase of 35,000 barrels from the preceding week. Daily average crude runs to stills of 8,120,000 barrels were 152,000 barrels below the preceding week, and 168,000 barrels above the week ended January 20, 1956. Runs of foreign crude amounted to 822,000 barrels daily, compared with 973,000 barrels in the preceding week. For the four-week period ending January 18, crude oil production averaged 7,409,000 barrels daily and crude runs to stills averaged 8,269,000 barrels daily with runs of foreign crude averaging 857,000 barrels daily.

Fuel Oil—Weather was warmer than normal for this time of the year in the New York city area last week. This ameliorated the worst effects of the barge strike and kept the fuel oil shortage from becoming a severe emergency.

Gasoline — Prices were moved down about 1c. per gallon in many parts of the North East, including Connecticut, Massachusetts, Rhode Island, and parts of Pennsylvania. Changes in tankwagon prices were reflected in reductions in the fair trade minimum price.

No price movements were noted in the gulf coast area during the week.

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Oils, Fats and Waxes

Slackened buying interest in oils and fats created an easier tone in this market last week. Trading in edible and industrial oils was light and spotty. Cottonseed, corn, and soybean oils declined about ¼ cent per pound, while peanut dropped ½ cent. Crude coconut oil was quiet and unchanged as was copra. Tallow was stronger and advanced fractionally due to the purchase of 14,000 tons of high grades for March-April shipments. but the market became easier and early gains were erased. Domestic interest continued light and was confined to actual needs. Soapers showed little interest in replacements at the higher level. Lard was easy, and declined sharply. Coconut oil fatty acid was reduced 1½ cents per pound and oleic acid ½ cent, while other fatty acids were held at former levels.

In drying oils, consuming demand was limited to actual requirements and quotations were shadable for round lots. Brazilian castor oil was easier and moved at lower levels, while domestic grades were well held. Tung oil was steady for spot delivery, while March forward delivery could have been shaded by firm bids. Oiticica was inactive and more or less nominal. Refined and distilled tall oil was advanced fractionally effective February 1. Crude tall oil was in tight supply and firmly held.

Consuming demand for vegetable waxes continued slow last week. This created an easier tone in the spot carnauba market and crude grades were off 1 cent per pound, with refined unchanged. Yellows was inactive and lower. Candelilla also was easier and reduced 5 cents per pound on spot.

Price Trends

Advanced

Oil, tall, dist., ¼c. per lb.
refd., ¼c. per lb.

Reduced

Acid, coconut oil, 1½c. per lb.
Oleic, ½c. per lb.
Cottonseed meal, $1 per ton.
Lard, cash, ¾c. per lb.
Linseed meal, $1 per ton.
Oil, castor, Braz., ¼c. per lb.
Corn, crude, ¼c. per lb.
refd., ¼c. per lb.
Cottonseed, crude, ⅝c. per lb.
refd., ⅜c. per lb.
Peanut, crude, ½c. per lb.
refd., ½c. per lb.
Soybean, crude, ¼c. per lb.
refd., ¼c. per lb.
Peanut meal, 50c. per ton.
Wax, candelilla, 5c. per lb.
Carnauba, crude Ceara, 1c. per lb.
Parnahyba, 1c. per lb.
Yellow, 1c. per lb.
Japan, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
120.03	120.85	119.30	100.40

For Current Prices see Page 9

Vegetable Oils

Castor—Consuming demand was reported limited to actual needs. Domestic grades were unchanged. No. 1 Brazilian was unsettled and available at 22c. to 22¼c. per pound, tankcars, New York, prompt delivery as to seller.

Coconut—Trading was reported slow. Crude was quoted at 11c. per pound, tankcars, f.o.b. Pacific coast and 12c., New York basis.

Corn—Crude was lower with sales at 14½c. per pound, tankcars, f.o.b. mills. Refined declined to 18.16c per pound, tankcars, New York, prompt delivery.

Cottonseed—Futures were weak and lower last week reflecting the easiness of allied markets. Liquidation was liberal and prices reached new lows for this movement. Trading was fairly active chiefly professional on a scale downward.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, February 8, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	266	16.82	16.26	16.28@16.35
May	480	16.82	16.25	16.26S
July	420	16.72	16.16	16.17S
Sept.	128	16.39	15.94	15.95S
Oct.	167	16.10	15.60	15.64S
Dec.	81	13.91	15.55	15.52@15.56
Mar.	17	15.85	15.51	15.51S

Total sales and switches, 1,559 contracts.

Hedging operations were light. Export interest lagged and there was no official news of additional funds available under PL 480. Argentine offered for export peanut and sunflower oils laid down Rotterdam at prices below the cost of either cottonseed or soybean oils from the United States. Casablanca reported to have purchased 3,000 tons of degummed soybean oil and 1,000 tons sunflower oil from the Argentine. February-March shipment Consuming demand was restricted to actual needs. Refined salad was lower at 17⅝c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil also was easy and lower. Resale oil was reported sold at 13⅞c. per pound, tankcars, Valley. Offers were available at 13⅞c. Lubbock and 14⅛c., Waco.

Margarine production in 1956 reached an all-time high of 1,369 million pounds, it was announced by the National Association of Margarine Manufacturers. This represents a 2.7 percent increase over the previous year's production, which was 1,333 million pounds. The former record annual production of margarine, established in 1954, was 1,364 million pounds.

Linseed—Quiet demand and lower flaxseed created an easier tone, but the price schedule for raw oil was unchanged at 13.4c. per pound, tankcars, Minneapolis, February-June delivery. Withdrawals of oil against contracts continued at a good rate.

Flaxseed—Market was weak and lower. Buying interest lagged.

Minneapolis.—Crushers reduced bids on cash flaxseed 6c. a bushel, on the heels of 2c. drop in preceding week. Offerings increased ahead of the declines as it became apparent to producers that crushers were extremely reluctant to raise price ideas. Report released by Department of Agriculture indicated flax in all positions totaling 39,464,000 bushels. Deadline for taking advantage of government loan was January 31, and the report to be released showing flax under loan as of January 15 will foreshadow the final figure. Flax bids were down to $3.32 a bushel, spot and to-arrive, basis Minneapolis. Offerings in the spot market totaled 20 cars, while to-arrive bookings ran up a total of 84 cars and 96,475 bushels.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	187,200	887,250	37,800
Since Sept. 1	15,004,000	18,454,350	2,007,000

Olive—This market remained steady for spot delivery and shipment from abroad. Tunisian oil ranged from $77 to $78, per 100 kilos, c. and f. New York, prompt shipment and $3.25 to $3.50 per gallon, drums, spot duty paid, as to quantity. Spanish was maintained at $3.50 to $3.60 per gallon, drums, spot duty paid, with trading on that basis. Offers for shipment from Spain now were expected available during the next few weeks.

Peanut—This market was easier, with crude sales at 15¼c. per pound, tankcars, f.o.b. mills and 15½c. asked following the rejection of bids for peanuts by the government. Refined was quoted at 19¼c. per pound, tankcars, New York, prompt delivery.

Soybean—Crude was weak and trading slow. Tankcars dropped to 13⅞c. per pound, tankcars, Decatur with sales at 13⅝c., March; 13¼c., April and 12⅞c. asked for May. Refined salad was lower at 16.96c. per pound, tankcars, New York, prompt delivery.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, February 8, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	7	13.65	13.60	13.44@13.50
May	3	13.08	12.88	12.88S
July	8	12.88	12.51	12.47@12.52
Sept.	24	12.26	11.97	11.97S
Oct.	1	11.75	11.75	11.77@11.85

Total sales, 43 contracts.

Tall—Refined grades were firmer and advanced ¼c. per pound, effective February 1. Tankcars ranged from 5½c. to 6c. per pound, f.o.b. works, as to grade and distilled, 6¼c. to 6½c., same basis. Crude was in tight supply and ranged from 2½c. to 3c. per pound, tankcars, works as to seller.

Tung—Trading was reported restricted

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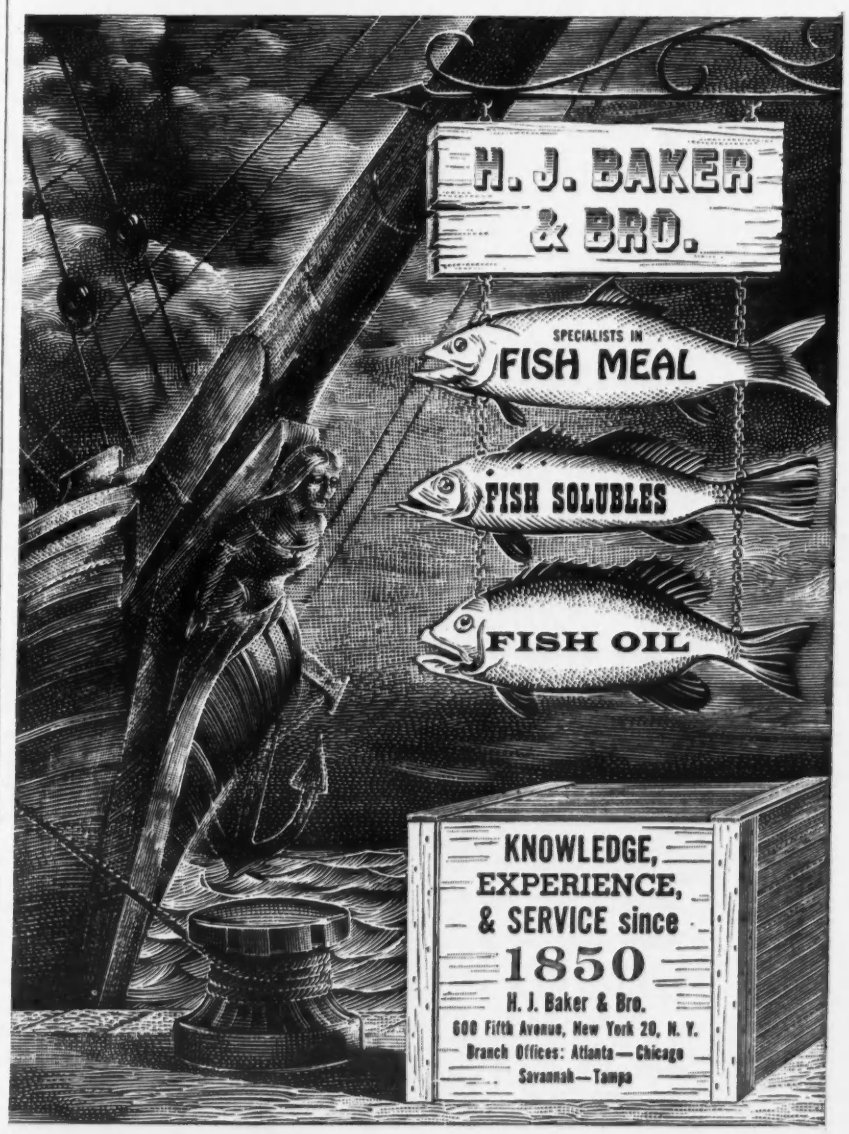

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to actual needs. Tankcars were held at 22½c. per pound, New York, February delivery and 22c. for March. Drums were quoted at 24c. to 24½c. per pound, spot as to quantity.

Miscellaneous

Castor Beans—Offers for shipment from Brazil were reported light and closely held. Quotations were more or less nominal at $185 to $195 per ton, f.o.b. Brazilian port.

Imports of castor beans, and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	1,517,250	2,068,000
Previous week	1,759,050	398,000
Corresponding week, 1956	2,032,050	4,014,000
Total this year	5,991,300	11,592,000
Corresponding period, 1955	9,320,900	12,792,000

Copra — Buying interest was slow. Prompt shipment was nominal at $151 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases — This market was irregular and early advances were not maintained due to liberal offerings. Choice white closed nominal at 8½c. per pound, tankcars deliverd. Yellow grease was sold at 6¾c. to 7c. per lb., same basis.

Lard—This market was easier and off sharply. Cash lard was quoted at 15c. per pound, drums, Chicago.

Oleo Oil—Business was reported slow. Extra was quoted at 19c. to 19½c. per pound, drums as to quantity. Oleo stearine was nominal at 14½c. to 15c. per pound, same basis.

Tallow—Active export sales for about 14,000 tons of high grade for shipment to Turkey temporarily stiffened the market and all grades advanced fractionally but increased offerings and slow demand resulted in the loss of the gains. Domestic demand was slow. Soapers showed no interest at the higher levels. Bleachable fancy was quoted at 7¾c. per pound, tankcars, delivered; prime, 7½c.; special, 7½c. and No. 1, 6⅞c., same basis. Guaranteed fancy was held at 9¼c., drums, f.a.s.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, February 8, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	5	7.85	7.85	7.75@7.85
Dec.	4	8.00	8.00	7.90 Bid

Total sales, 9 contracts.

Fatty Acids

Oleic and coconut oil fatty acids were easier and declined ¾c. and 1½c. per pound respectively. Other animal and vegetable acids were quotably unchanged and steady. Consuming demand was moderate for prompt needs, while withdrawals against former contracts continued at a good pace.

Cake and Meal

Cottonseed Meal — Trading continued slow. Most oil mills report that they have only enough meal to take care of local demand for the remainder of the season, therefore relatively small tonnages are offered for sale. Prices for 41 percent old process were lower at $56 per ton sacked Memphis; $62 Georgia $61 South Carolina mills points, February shipment.

Linseed Meal—Market weak and lower. Trading inactive.

Minneapolis.—Prices weakened as users displayed almost complete lack of interest in forward coverage. Crushers had substantial backlogs on books, but even withdrawals were lagging somewhat. Indications were that trade watched for traditional February decline, hopeful of lower levels. Extracted linseed meal declined $1, while expeller type dropped $2.50. Major offerings came from re-handlers, some trading as low as $50 a ton. Extracted linseed meal, 36 percent protein, was quoted at $51 to $52.50 for February forward, bulk, in carlots, f.o.b., Minneapolis. Expeller meal, 32 percent protein, dropped to $56.50 for February forward.

Waxes

Slow consuming demand for vegetable waxes unsettled the market and quotations were easy and lower for carnauba, candelilla and Japan wax on the spot. No. 3 crude Ceara was available at 65c. to 67c. per pound and Parnahyba, 67c. to 69c., spot according to seller and quantity. Candelilla also was reduced in some quarters. Crude was quoted at 65c. to 67c. per pound and refined to 68c. to 70c., spot, according to quantity and seller. No. 1 Ceara yellow was lower at $1.37 to $1.39 per pound and Parahyba, $1.39 to $1.41, spot, depending upon quantity. Japan wax was weaker and available at 43c. to 44c. per pound, spot, as to quantity. Crude and refined beeswax remained unchanged and steady for all grades.

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Bids Wanted

Aluminum sulfate, 2,239,100 lbs., inv. (1)-1411, Feb. 13, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Ammonium hydroxide, 45,744 lbs., tech., inv. (1)-1410, Feb. 13, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Calcium carbide, 180,000 lbs., inv. 626, Feb. 18, Navy Purchasing Office, Naval Supply Center, Norfolk, Va.

Cornstarch, 603,984 lbs., edible, inv. 1056Q, Feb. 18, Chicago Military Subsistence Market Center, 226 West Jackson Blvd., Chicago 6, Ill.; 65,088 lbs. cornstarch, inv. (1)-1411, Feb. 13, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Fungicide, 10,010 gals., liquid, 5% pentachlorophenol active ingredient, inv. 14, Feb. 18, Jefferson Quartermaster Depot, 1201 E. 10th St., Jeffersonville, Ind.

Paint, 900 gals., gloss or semigloss, inv. 119, Feb. 13, Atlanta Gen. Depot, Purchasing Div., Forest Park, Ga.; 3,585 gals. syn. enamel, inv. (4)-1453, Feb. 18, 13,575 gals. lusterless enamel, quick drying (for ammunition), inv. (4)-1449, Feb. 19, 9,200 gals. acid-resistant for aluminum surfaces spraying lacquer, inv. (4)-1461, Feb. 19, 6,600 gals. traffic paint, reflectorized for runway type 1, inv. 1450, Feb. 18, 6,930 gals. semigloss, interior deck paint, inv. (4)-1474, Feb. 19, 4,305 gals. exterior traffic paint, class B, inv. (4)-1482, Feb. 19, 13,407 gals. olive drab, exterior ready mixed paint, inv. (4)-1460, Feb. 19, 17,908 gals. lusterless enamel, 26,908 gals. syn. gloss enamel, 2,016 qts. aircraft gloss enamel, 3,125 kits phosphorescent type paint, inv. 1455, Feb. 20, 904 gals. cellulose nitrate lacquer, 19,368 qts. syn. gloss enamel, 4,485 gals. emulsifiable camouflage paint, 631 gals. cellulose nitrate lacquer, inv. (4)-1475, Feb. 19, 1,760 gals. paint and varnish remover, 868 qts. cellulose nitrate lacquer, 1,380 gals. stencil paint, 1,148 gals. camouflage paste paint, 3,000 gals. green chrome exterior paint, inv. (4)-1454, Feb. 19, 4,200 gals. syn. primer paint for ferrous metal and wood surfaces, inv. (4)-1452, Feb. 19, Gen Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Sodium hypochlorite, 27,900 qts., solution, (Javelle water), inv. (1)-1408, Feb. 13, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Sulfuric acid, 1,200 13-gal. carboys, electrolyte, inv. 383, Feb. 15, Commanding Officer, Raritan Arsenal, Metuchen, N. J.

Zinc ammonium, 22,100 lbs., chloride-saponin mixture, galvanizing flux, inv. (1)-1398, Feb. 14, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Imports at U. S. Ports

—*Continued from page 51*

LOCUST BEAN GUM—100 bgs, Thurston & Braidich, Rotterdam
MOLASSES—1,698 tons, National Molasses Co, Mazatlan
2,777 tons, Southwestern Sugar & Molasses Co, Iloilo
PAPRIKA—575 bgs, Hismoco American Co, Trieste
PEATMOSS—1,500 bgs, H V Nootbaar & Co, Hamburg
PEPPER, RED—43 bgs, Hirisaki Farms, Kobe
200 bgs, Pan Asiatic Trading Co, Kobe
100 bgs, Hismoco American Co, Kobe
100 bgs, The Beton Co, Yokohama
PETROLEUM, CRUDE—126,366 bbls, Richfield Oil Corp, Punta Cardon
11,834 tons, Richfield Oil Corp, Vancouver
28,313 tons, Wilshire Oil Co, Las Piedras
POPPY SEED—100 bgs, Rotterdam
QUEBRACHO EXTRACT—1,305 bgs, Tan American Extract, Buenos Aires
1,470 bgs, River Plate Corp, Buenos Aires
SEEDLAC—170 bgs, H M Newhall & Co, Bangkok

Philadelphia

BEEF EXTRACT—325 cs, Buenos Aires
BONE—2,074 bgs, Baugh & Son, Buenos Aires
CASEIN—400 bgs, A J Mills & Co, New Plymouth
500 bgs, National Casein Co, Rotterdam
CASTOR OIL—1,034 tons, Rohm & Haas, Bombay
CHESTNUT EXTRACT—400 bgs, Barkey Importing Co, Genoa
CODLIVER OIL—372 dms, Leixoes
CRESYLIC ACID—200 dms, Rotterdam
EARTH COLORS—1,643 bgs, C K Williams Co, Larnaca
FUEL OIL—124,000 bbls, Esso Standard Oil Co, Aruba
GLANDS—95 cs, Rohm & Haas, Lyttleton
GYPSUM, CRUDE—6,083 tons, U S Gypsum Co, Hantsport
LOCUST BEAN GUM—200 bgs, T M Duche & Sons, Bombay
MAGNESITE—2,079 tons, Split
PETROLEUM, CRUDE—120,228 bbls, Socony Mobil Oil Co, Covenas
109,492 bbls, Socony Mobil Oil Co, Las Piedras
210,725 bbls, Atlantic Refining Co, Puerto La Cruz
257,674 bbls, Atlantic Refining Co, Pamatacual
1,051,726 bbls, Gulf Oil Corp, Puerto La Cruz
PHOSPHATE ROCK—3,148 tons, H J Baker & Bro, Curacao
RUTILE SAND—11,302 bgs, Union Carbide Co, Brisbane
7,000 bgs, Brisbane
SHELLAC—50 bgs, Colony Import & Export Corp, Calcutta
SODIUM SILICOFLUORIDE—250 bgs, Rotterdam
UREA—600 bgs, Nylos Trading Co, Genoa
WATTLE EXTRACT—842 bgs, Durban
ZIRCON SAND—10,000 bgs, Brisbane

San Francisco

BARIUM CARBONATE—2,000 bgs, Enco Chemical Corp, Rotterdam
CALCIUM NITRATE—18,000 bgs, Wilson & Geo Meyer & Co, Heroya
CARAWAY SEED—200 bgs, B C Ireland, Rotterdam
CASEIN—89 bgs, J R Spellacy, Melbourne
280 bgs, J R Spellacy, Sydney
COPRA—500 tons, Cargill Inc, Zamboanga
500 tons, Cargill Inc, Dumaquete
970 tons, Cargill Inc, Cebu
250 tons, Cargill Inc, Tabaco
500 tons, Cargill Inc, Siain
500 tons, Paul X Smith Corp, Bulan
300 tons, Pacific Vegetable Oil Corp, Tabaco
CAKE—100 tons, Pacific Vegetable Oil Corp, Manila
2,000 bgs, Pacific Vegetable Oil Corp, Cebu
200 tons, Atkins Kroll & Co, Zamboanga
CUPROUS OXIDE—224 dms, Glasgow
DEXTRIN—73 bgs, Stein Hall & Co, Rotterdam
GRAPHITE—1,000 bgs, Pacific Graphite Co, Hong Kong
GYPSUM, CRUDE—20,130 tons, Kaiser Gypsum Co, San Marcos
LAURIC ACID—203 bgs, Golwynne Chemical Corp, Hull
PEATMOSS—650 bls, Lastreto Phillips, Rotterdam
500 bls, East Asiatic Co, Bremen
PEPPER, BLACK—880 bgs, Hong Kong
RED—100 bgs, M S Cowen Co, Kobe
PETROLEUM, CRUDE—120,325 bbls, Tidewater Oil Co, Vancouver
POPPY SEED—100 bgs, B C Ireland, Rotterdam
SODIUM CYANIDE—150 dms, C M C Chemicals Inc, Glasgow
TAPIOCA FLOUR—1,200 bgs, Internatio Rotterdam, Bangkok
5,800 bgs, American Key Products, Bangkok
500 bgs, Stein Hall & Co, Bangkok
UREA, SYNTHETIC—300 bgs, C M C Chemicals Inc, Glasgow
WALNUT OIL—1 cs, Stuart Imports, Havre
WAX—58 bgs, Dura Commodities Corp, Bremen

Olin Is Readying

—*Continued from page 5*

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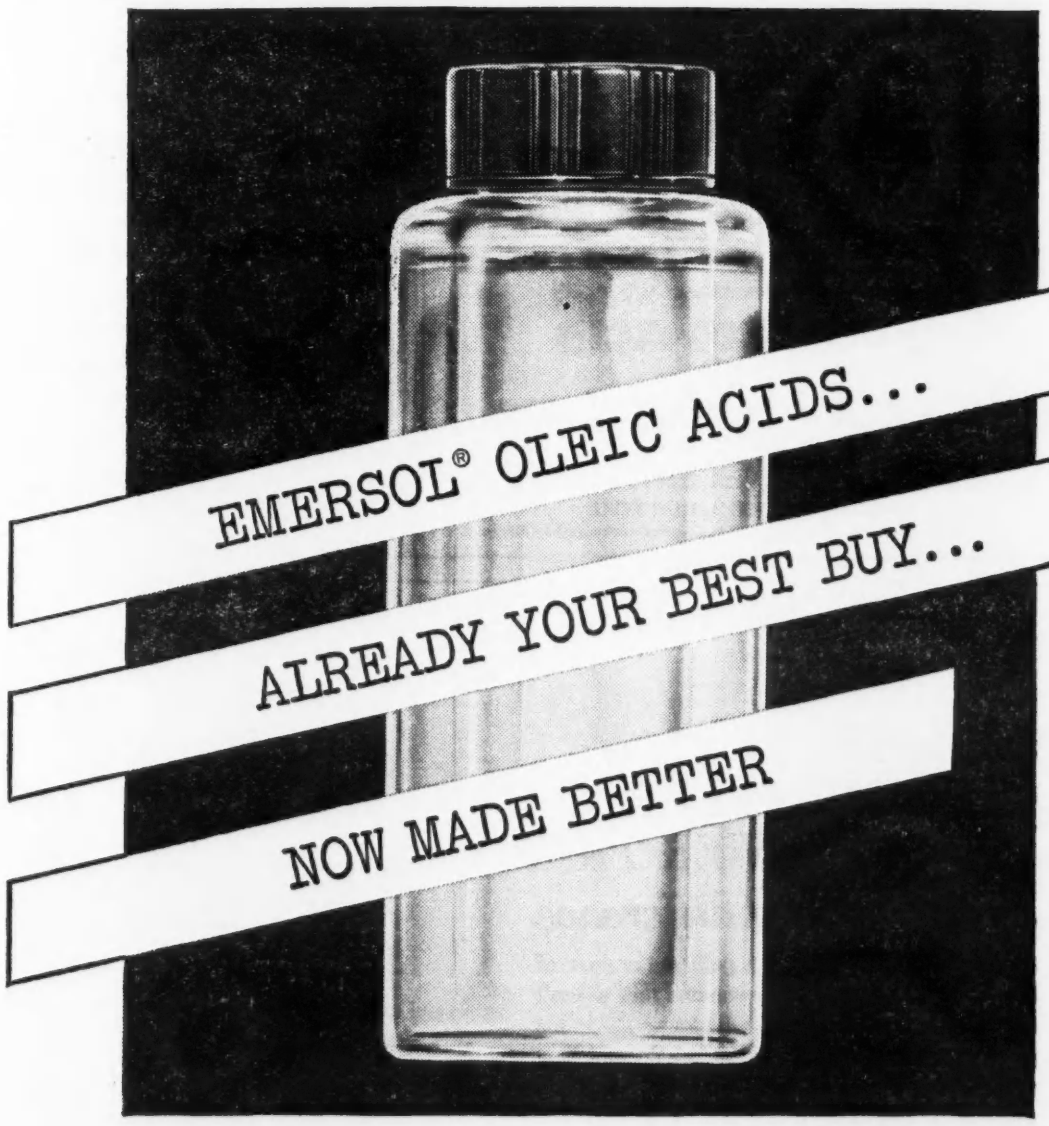

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Textile, Leather Chemicals

While new business in textile and leather chemicals was spotty last week, consumers continued to absorb a good volume of materials against former contracts. A steady tone prevailed in the market and most items were unchanged and well held. Lower prices were announced for quebracho and wattle extracts. In order to stimulate consumption of these materials producers reduced prices fractionally effective February 1. The reduction in quebracho was the first official price change to tanners since September, 1951. South American mangrove bark also was slightly lower, reflecting the recent decline of African bark.

In sizing materials, demand for potato starch was moderate, chiefly for actual needs. Prices were unchanged and well held. Interest in Siamese flour for replacement lagged, with sellers quoting slightly higher prices for February shipment due to higher ocean freight rates. Trading in Brazilian flour was restricted to small lots on the spot.

Production of rayon and acetate yarn and staple in the United States during 1956 totaled 1,147,900,000 pounds, a decline of 9 percent from the 1,260,700,000 pounds produced in 1955, according to the Textile Economics Bureau. Output of all rayon and acetate products declined in 1956 from the previous year with the exception of rayon staple and tow which rose 1 percent. Decreases in other products ranged from 1 percent for acetate staple and tow to 16 percent in acetate filament yarn production. High tenacity rayon yarn output fell 14½ percent and regular and intermediate tenacity rayon yarn declined 8 percent.

Producers' shipments of rayon and acetate totaled 1,126,800,000 pounds last year compared with 1,261,900,000 pounds in 1955, a decrease of 135,100,000 pounds or 10½ percent. With shipments off somewhat more than output, producers' stocks at the end of 1956 rose to 107,500,000 pounds, some 21,100,000 pounds or 24½ percent higher than the 86,400,000 pounds held at the end of 1955.

Price Trends

Advanced
None.

Reduced
Mangrove bark, So. Am., $1 per ton
Quebracho extract, solid, ¾c. per lb.
Wattle extract, ¾c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Feb. 10, 1956
108.25	108.45	108.53	106.60

For Current Prices see Page 9

Chemicals

Bichromates—Market remained steady. Consumers absorbed sizable quantities against current contracts. Prices were maintained for all grades.

Sodium Hydrosulfite—Good consuming demand was reported for actual requirements. Prices were without change and well held.

Sizing Materials

Corn Dextrin—Steady improvement was noted in demand for prompt needs. All grades were held at former levels. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white $8.91, same basis. Smaller lots were 15c. higher.

Corn Starch—This market remained steady. Demand was reported moderate for prompt needs. Quotations were without change. Pearl was quoted at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply was lower declining 1,218,000 bushels to 68,281,000 bushels for the week ended February 1, against 50,960,000 bushels for the same time last year it was reported by the Chicago Board of Trade.

Egg Albumin—Trading was restricted to actual needs. Stocks were liberal and offered freely. Flake was quoted at $1.49 to $1.51 per pound and powder, $1.53 to $1.55, spot according to quantity. Technical was unchanged and steady at $1.08 to $1.10 per pound, same basis.

Liquid egg production during December 1956 was considerably larger than in December a year earlier. The December, 1956, production totaled 12,757,000 pounds compared with 4,191,000 pounds in December, 1955, and the 1950-54 average of 8,078,000 pounds. The quantities used for immediate consumption drying and freezing were all larger than in December, 1955.

Egg solids output during December totaled 1,592,000 pounds compared with 489,000 pounds during December, 1955, and the 1950-54 average of 866,000 pounds. December production consisted of 451,000 pounds of dried whole egg, 509,000 pounds of dried albumin and 632,000 pounds of dried yolk. Production during December, 1955, consisted of 52,000 pounds of dried whole egg, 329,000 pounds of dried albumen, and 108,000 pounds of dried yolk.

Egg Yolk—Demand was restricted to prompt needs. Prices were steady ranging from $1.05 to $1.09 per pound, spot, depending upon quantity and seller. Production in December totaled 632,000 pounds compared with 108,000 pounds in December, 1955.

Potato Starch—Buying interest was reported spotty, chiefly for actual needs. Prices remained steady and unchanged. Carlots were maintained at 6¼c. per pound, mills, Maine for prompt and later delivery. Supplies in Idaho were reported tight and maintained at 6¼c., carlots, mills, and 5¾c. for shipment to eastern points. Stocks on spot were unchanged at 8¼c. to 9¼c. per pound, exwarehouse, as to quantity.

Tapioca Flour—Deliveries against contracts moved in good volume, while new business was confined to actual needs. Interest in replacements was quiet. Siamese medium grade was quoted at 5.45c. per pound, carlots, exdock, prompt shipment and grade A 5.95c., same basis. Trading in Brazilian was restricted to small lots on spot from 12c. to 13½c. per pound, exwarehouse, as to quantity.

Tanning Materials

Shoe production in December was officially placed at 41,475,000 pairs, a decrease of 8.9 percent from December, 1955. This decline was due almost entirely to the fewer number of working days in December, 1956. The final tabulation for the year showed 1956 output as 585,657,000 pairs, an increase of 1.5 percent over 1955. Increases over 1955 production took place in the following categories: men's work shoes, women's regular shoes, misses' shoes, athletic, slippers, and other footwear.

The proportion of shoes with all leather uppers averaged 82 percent for the year and with all leather soles, 35.6 percent. Shipments exceeded production by 2,698,000 pairs during the year.

Chestnut Extract—This market was quiet and unchanged. Solid extract guaranteed 60 percent was unchanged at 9.33c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10.85c., same basis.

Cutch—Shipments were maintained at 8½c. per pound, carlots, exdock, plus duty. Interest in replacements was fairly active.

Quebracho Extract—This market was lower and shipments from the Argentine were reduced about ¾c. per pound, effective February 1. This was the first official change in quotations to tanners since September, 1951. Solid clarified 64 percent declined to 11½c. per pound, carlots, exdock, plus duty and ordinary, 63 percent to 10.85c., same basis, plus duty. Prices included current ocean freight rate of $25.50 per 2,240 pounds and marine and war risk insurance.

Wattle—Lower prices for quebracho extract were reflected in wattle extract and quotations dropped about ¾c. per pound, East African 60 percent was reduced to 9.15c. per pound, carlots exdock, plus duty and south African to 9.3c. per pound, same basis, plus duty. Prices included current ocean freight rate of $23.50 per 2,240 pounds and marine and war risk insurance.

Bark was not affected and remained quotably unchanged. Fair average was quoted at $95 to $96 per ton, exdock, prompt shipment and merchantable, $91 to $92 per ton, same basis.

Synthetic Newcomers

—Continued from page 7

in 1937 to 539 million pounds or 75 percent of total consumption in 1952," the speaker said.

"Larger production means lower unit cost," Mr. Schwarz went on. "This is especially important since really large scale consumption for a textile fiber is very much a price question. It is a general assumption, that the price of a fiber for mass production has to come closer to the price level of rayon and as far as can be judged now, the acrylics have the best chance of doing this eventually. The break-through into the low cost fiber market would be the crowning achievement for the synthetics.

"Some fiber manufacturers are working on new monomers for raw materials to achieve this. Roughly the price doubles with each step from raw material to monomer to polymer to fiber, so that a very cheap monomer would make it possible to manufacture fibers competitive pricewise with cotton and rayon. One of these new raw materials is propylene and a polypropylene fiber could be magic fiber to break the low price fiber barrier." Mr. Schwarz pointed out.

Fertilizer Safety

—Continued from page 7

be given over to a panel discussion on "What a Good Safety Program Can Do for the Fertilizer Industry." Vernon S. Gornto of Smith-Douglass Company, Norfolk, will moderate the discussion. Following are the topics and participants:

"Mobile Plant Equipment," Grayson Morris, Southern States Cooperative; "Electrical Hazards," A. H. Haeberle, Virginia-Carolina Chemical Corporation, Richmond; "Safety Training Program for Plant Foremen," Mike C. Ellison, Mississippi Chemical Corporation, Yazoo City, Miss.; "Housekeeping and Safety," W. A. Stone, Wilson & Toomer Fertilizer Company, Jacksonville, Fla., and "First Aid—Import to a Safety Program?" Mrs. Ann Turbeville, Florence Manufacturing Company, Florence, S. C.

Diamond and Ionics

—Continued from page 7

group will continue their efforts as heretofore from their facility at Cambridge, Mass., this group will work closely with our own research and development group of more than 250 people at Painesville, Ohio."

Diamond's board chairman also pointed out that Ionics will continue independently to pursue its interests in the fields of water conditioning, ion exchange treatment of sugar solutions and other already established actvities to promote ion exchange membranes.

In addition, the Massachusetts research organization is expected to continue its work with the Atomic Energy Commission and certan other private groups.

Antitrust Enforcement

—Continued from page 5

convenience and expense to a plaintiff are juxtaposed to orderly procedure, it seems most unwise to bar the United States from resort to the district courts in vindication of policies whose enforcement congress has expressly reposed in the Attorney General through resort in those courts.

"The sole reliable counterweight to industry-mindedness of specialized agencies is provided by this mandate to the unspecialized law enforcement agency. To require the Department of Justice to play a subordinate role before the regulatory boards unduly prejudices antitrust enforcement."

Latex Paint

—Continued from page 7

tial applications that time and research will ultimately bring about."

"Exterior latex paints for masonry construction have been available since 1953 and their acceptance has grown tremendously each year. The application of latex paint technology to the field of metals is definitely within the realm of reality—to appliances, industrial equipment, perhaps even automobiles," he said.

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3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
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3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
6—Bartlett & Snow Rotary Dryers 6'x30', 7'x30', 8½'x35'.

MIXERS

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5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
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1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Devine 5'x10' steel jacketed Ball Mill.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50". 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

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2—Struthers-Wells 536 sq. ft. Heat Exchangers 304 S.S.
1—Struthers-Wells 536 sq. ft. Heat Exchanger 304 S.S.

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1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
1—Feinc 5'x3' Monel Rotary Vacuum String.
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1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
1—Niagara #95-36 Pressure Filter, 92 sq. ft.. 304 S.S.
2—#3 Sweetland Filters 304 S.S., 12-25" dia. leaves. 75 sq. ft.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
6—Robinson, Sprout Waldron, 304 S.S. Sifter, 40"x84" single deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
1—Stokes #21J, 304 S.S. Granulating Mixer, NEW.
10—Nash Vacuum Pumps H7, H6. H5, L5, L4, TS7, #4, #2, AL-572.
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3—Lightnin Side Entering, St. St., 15 HP.
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1—Patterson 18" dia. St. St. Conical Blender.
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3—Sprout Waldron size 12, 336 cu. ft. Ribbon Blenders.
1—Broughton 50 cu. ft. Double Arm Powder Blender.
1—Worthington 75 cu. ft. Rotating Batch Blender.

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1—Patterson Ball Mill, porcelain lined, 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
2—Large Steam Jacketed Horizontal Mixers.
2—Ribbon Type Mixers, 50 & 90 cu. ft.—like new.
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2—Ball & Jewell ±2 Cutters with 75 H.P. Motors.
1—J. H. Day 3-roll Mill 9x16.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—±10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60" with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—4'x8' Shaker Screens.
1—150 gal. Steam Jacketed Closed Tank 200± A.S.M.E.
1—Carver Laboratory Press.

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1—40 gallon pony mixer, SS, J H Day.
3—Colton automatic tube fillers Model #17TF—14AF.
1—Standard Knapp #429 case glue & sealer.
3—Stokes model T tablet presses.
1—Stokes model R tablet press.
4—Devine vacuum shelf dryers (3, 5, 10 shelf) 40"x44".
8—Day powder mixers (50 to 7500#).
4—Filter presses, iron 24", closed delivery.
1—Everdur 24" filter press, 4 eye, 21 chambers, pyramid plates.
3—Furocel stainless steel filters, 75 sq. ft. each.
2—Baker-Perkins 2½ gallon sigma bladed mixers, 1 stainless.
1—Buffalo-Vac double drum dryer 42x120".
1—Buffalo-Vac lab dryer 6x6".
2—Fitzpatrick comminutors, models D & K.
1—Sweetland #11 stainless filters sq. ft.
21—Kux #61 - 2½" tablet presses.
1—500 gallon Pfaudler glass lined reactor, jkt., agt., 5 HP, x proof.
3—New Simpson mixers #0, 3' pan.
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1—Sharples stainless super-d-hydrator, 20 HP.

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1—Link Belt Stainless Steel Roto Louvre Dryer, Model 207-14.

1—Buflovak 6′ Vacuum Pan Dryer.

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1—Leader Type 347 Stainless Steel Jacketed Reactor, 2000 gal.

1—Downingtown Iron Works Steel Jacketed Reactor, 1500 gal.

1—Chicago Bridge Steel Pressure Tank, 18,000 gal., 80 PSI.

1—Chicago Bridge Hortensphere, 4500 gal., 200 PSI.

5—Pfaudler Glass-lined Jacketed Reactors, 300 gal. ea.

1—AT&M TYPE 316 Stainless Steel Suspended Type Centrifugal, complete with 18″ perforated basket.

2—Stokes Stainless Steel Revolving Vacuum Dryers, 3′ x 10′.

1—Bird Stainless Steel Suspended Type Centrifuge, complete with 40″ perforated basket.

3—AT&M Suspended Type Centrifuges, complete with 30″ Imperforated baskets.

1—Baker Perkins Type 316 Stainless Steel Multimatic Centrifugal Filter, Model HS-24″.

1—Niagara Type 316 Stainless Steel Jacketed Filter, Model 45-30.

1—Oliver Rotary Vacuum Filter 3′ x 2′, Rubber Covered.

1—Oliver Rotary Vacuum Filter 3′ x 6′, Rubber Covered.

1—Oliver Type 304 Stainless Steel Precoat Filter, 3′ x 6′ (New).

10—Sweetland #12 Filters with 72 Stainless Steel leaves.

1—Sweetland #7 with 48 copper leaves.

13—Stokes Model F Tablet Machines.

2—Stokes Model R Tablet Machines.

1—Allis Chalmers Rotary Dryer, 7′ x 64′ 6″.

1—Stokes DDS2 Rotary Tablet Machine.

1—Vulcan Steel Bubble Cap Column, 42″ x 30′, with 20 trays New.

1—Vulcan Steel Bubble Cap Column, 24″ x 30′ with 20 trays (New).

2—Sharples Type 316 Stainless Steel Centrifuges, Model D-2 (New).

1—Vulcan Steel Bubble Cap Column, 18″ x 25′ with 17 trays.

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10—Baker Perkins 100 gal. Sigma Blade Jacketed Mixers.

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1—Stokes "DD-2" Rotary Tablet Machine.
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2—#12 Sweetland Filters, 36 monel leaves on 4″ centers.
1—Steel jack., agitated Kettle, 800 gals.
1—Steel jack. Kettle, 1000 gals.
3—Day & Ross, 15-50 gal. Pony Mixers.
2—Fletcher 48″ S.S. Extractors.
1—Inconel Heat Exchanger, 195 sq. ft.
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2—Patterson 4′ x 5′ and 5′ x 6′ Pebble Mills.
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For Sale—Stainless centrifugal, "American" 40 x 20 used few weeks only; 2-speed, still erected, bargain price. OPD 263.

For Sale—"Niagara" 330 sq. ft. diatomaceous earth filters (2); Quick-opening covers; price $4,000 f.o.b. Chicago OPD 264.

For Sale—9" x 8" twin-cylinder air compressor, capacity approx. 200 CFM at 350 RPM, with 40 HP motor. OPD 265.

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Treasury Wants

—Continued from page 3

price—such as restrictions on sale, credit terms, advertising and selling costs, and minor variations in method of production or manufacture.

- Provide that the standard for assessing dumping duties shall be third country price rather than home consumption price if the volume of home consumption sales is so small as to furnish an inadequate basis for comparison.
- Disregard home consumption sales made to a sales agency in order to arrive at a realistic price to be used as a basis for comparison.
- Re-define the provision relating to "such or similar" merchandise so as to allow comparisons between articles which, though not similar under the restricted, technical sense of the term, are in fact sufficiently alike to warrant the comparison for the purposes of the antidumping act.

As regards the regulations, the report proposes that determinations as to fair value be considered on the basis of a relatively simple calculation in arithmetic, rather than by economics reasonng.

Typically, a calculation as to whether the foreign producer's price is lower when he sells his product for export to the United States market than when he sells it, not for export, in his own country.

In the area of administration of the law, it is proposed that a new invoice form be provided which by asking for additional information will enable customs officials more readily to spot sales at a dumping price, and raise the question of dumping at once without waiting for complaints from American industry.

Monsanto Negotiating

—Continued from page 3

continues as the largest domestic producer of synthetic caffeine.

Vice-president Charles H. Sommer said that the strong competition from imports of cheap foreign caffeine which, along with the scarcity and high price of raw materials, forced the plant's closing last year has continued and increased. Mr. Sommer is general manager of the organic chemicals division of Monsanto which operated the Norfolk plant.

"Inquiries have been received from a number of parties interested in the idle property," he said. "We believe that it is in the best interests of the community and Monsanto to sell the site to someone and thus restore it as a source of local employment."

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